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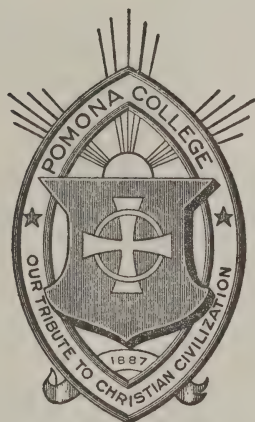
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1950-1951



Pomona College

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CALENDAR FOR 1950

JANUARY	FEBRUARY	MARCH	APRIL
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CALENDAR FOR 1951

JANUARY	FEBRUARY	MARCH	APRIL
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COLLEGE CALENDAR FOR 1950 - 51

FIRST SEMESTER

SEPTEMBER 15, FRIDAY	Residence halls open for new students only 12 noon Meeting of Joint Committee
SEPTEMBER 15-18	Program for new students
SEPTEMBER 16, SATURDAY	Faculty Meeting, 10 a.m.
SEPTEMBER 18, MONDAY	Conference Day and Registration for new students
SEPTEMBER 19, 20 TUESDAY AND WEDNESDAY	Registration for returning students. Residence halls open for returning students
SEPTEMBER 21, THURSDAY	First semester classes begin, 8 a.m. Opening Convocation, 11 a.m.
OCTOBER 5, THURSDAY	Last day for entering courses
OCTOBER 12, THURSDAY	Founders Day, Flame Ceremony, 11 a.m.
OCTOBER 30, MONDAY	First low grade report due
NOVEMBER 2, THURSDAY	Final day for withdrawal from classes without penalty
NOVEMBER 22, WEDNESDAY	Thanksgiving recess begins, 9:30 p.m.
NOVEMBER 27, MONDAY	Thanksgiving recess ends, 8 a.m.
DECEMBER 4, MONDAY	Second low grade report due
DECEMBER 16, SATURDAY	Christmas vacation begins at noon
JANUARY 3, WEDNESDAY	Christmas vacation ends, 8 a.m.
JANUARY 20, SATURDAY	Last day of classes
JANUARY 24, WEDNESDAY	Final examinations begin
JANUARY 31, WEDNESDAY	Final examinations end
FEBRUARY 3, SATURDAY	First semester ends

COLLEGE CALENDAR FOR 1950 - 51

SECOND SEMESTER

FEBRUARY 5, MONDAY	Opening day for classes at Scripps College, Pomona students enrolled in Scripps courses are expected to attend.
FEBRUARY 6, TUESDAY	Registration
FEBRUARY 7, WEDNESDAY	Second semester classes begin, 8 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 8, THURSDAY	Opening Convocation, second semester, 11 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 21, WEDNESDAY	Last day for entering courses
MARCH 10, SATURDAY	Matriculation Day
MARCH 19, MONDAY	First low grade report due
MARCH 21, WEDNESDAY	Final day for withdrawal from classes without penalty
MARCH 31, SATURDAY	Spring vacation begins, noon
APRIL 9, MONDAY	Spring vacation ends, 8 a.m.
APRIL 28, SATURDAY	Second low grade report due
MAY 19, SATURDAY	Last day of classes for Seniors
MAY 26, SATURDAY	Last day of classes
MAY 28, MONDAY	First day of examinations
MAY 30, WEDNESDAY	Memorial Convocation, 5 p.m.
JUNE 3, SUNDAY	Associated Colleges Baccalaureate
JUNE 6, WEDNESDAY	Examinations end
JUNE 9, SATURDAY	Alumni Day
JUNE 10, SUNDAY	Commencement
JUNE 14, THURSDAY	Scholarship Committee Meeting
JUNE 15, FRIDAY	Joint Committee Meeting

BOARD OF TRUSTEES

OFFICERS

Rudolph J. Wig, *President*
Arthur J. McFadden, *Vice-President*
Paul Fussell, *Vice-President*
Ernest E. Jones, *Secretary-Treasurer*

TERM OF OFFICE EXPIRES JUNE, 1950

C. Stanley Chapman, <i>Fullerton</i>	Robert P. Jennings, <i>Sierra Madre</i>
Mary Clark Eversole, <i>La Canada</i>	Paul S. Armstrong, <i>Los Angeles</i>
Frank R. Seaver, <i>Los Angeles</i>	George W. Bryant, <i>San Marino</i>

TERM OF OFFICE EXPIRES JUNE, 1951

William B. Himrod, <i>Hollywood</i>	Yale B. Griffith, <i>Santa Barbara</i>
Arthur J. McFadden, <i>Santa Ana</i>	E. Wilson Lyon, <i>Claremont</i>
Charles E. Donnelly, <i>Los Angeles</i>	James W. Fifield, Jr., <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1952

Willis H. Merrill, <i>Long Beach</i>	Seeley G. Mudd, <i>San Marino</i>
George L. Eastman, <i>Hollywood</i>	Rudolph J. Wig, <i>San Marino</i>
Edwin F. Hahn, <i>Pasadena</i>	Frederick S. Bale, <i>Pasadena</i>

TERM OF OFFICE EXPIRES JUNE, 1953

George S. Sumner, <i>Claremont</i>	Dell A. Schweitzer, <i>La Crescenta</i>
Arthur M. Dole, <i>Pomona</i>	Morris B. Pendleton, <i>San Marino</i>
Mrs. Victor Montgomery, <i>Beverly Hills</i>	George R. Martin, <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1954

Fred W. Smith, <i>Ojai</i>	Roy E. Thomas, <i>Los Angeles</i>
Elmo H. Conley, <i>Pasadena</i>	Paul Fussell, <i>Pasadena</i>
William A. Johnson, <i>San Marino</i>	Robert H. Craig, <i>Puente</i>

HONORARY MEMBERS

Donald G. Aplin, <i>Highland</i>	Luther Freeman, <i>Claremont</i>
William L. Honnold, <i>Los Angeles</i>	Mary McLean Olney, <i>Berkeley</i>
William S. Mason, <i>Pasadena</i>	David P. Barrows, <i>Berkeley</i>

EX-OFFICIO MEMBERS

Managing Director, Claremont College
President of the Alumni Association

FORMER PRESIDENTS OF THE COLLEGE

Cyrus G. Baldwin, 1890 - 1897	Franklin L. Ferguson, 1897 - 1901
George A. Gates, 1901 - 1910	James A. Blaisdell, 1910 - 1928
Charles K. Edmunds, 1928 - 1941	

GENERAL ADMINISTRATION

1950 - 1951

- E. WILSON LYON President
209 Sumner Hall
B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; D.Litt., Occidental College.
- PAUL H. BURTON Controller
Harper Hall
B.A., Western Reserve University.
- WILLIAM V. SHANNON Treasurer
Harper Hall
B.S., Virginia Military Institute.
- MARJORIE B. WOODFORD Assistant Treasurer
Harper Hall
B.A., Pomona College; M.A., Columbia University.
- GLENN V. FULLER Bursar
Harper Hall
B.A., Ohio State University.
- ALLEN F. HAWLEY Director of Alumni and Public Relations
203 Sumner Hall
B.A., Pomona College; Graduate Student, Harvard University.
- JOHN F. MOULDS Assistant to the President
203 Sumner Hall
Ph.B., University of Chicago.
- WILLIAM L. WHEATON Alumni Secretary
212 Sumner Hall
B.A., Pomona College; M.A., New York University.
- ROBERT R. CALLANDER Director of News Bureau
108 Sumner Hall
B.A., Union College.
- WILLIAM B. HIMROD Assistant to the President
203 Sumner Hall
B.A., Pomona College. Graduate Student, University of Southern California.
- AGNES M. JOHNSON Executive Secretary to the President
209 Sumner Hall
- INA T. NIDER Social Director, Women's Campus
Harwood Court
B.A., Fresno State College; M.A., Columbia University.

FRANCES G. BARBEY

Head Resident, Blaisdell and Mudd Halls
Mudd Hall

B.A., Reed College; M.A., Teachers College, Columbia University.

LOUIS B. PERRY

Social Director, Men's Campus
Eli P. Clark Hall

B.A., M.A., and Ph.D., University of California at Los Angeles.

MAY C. FRANK

Director of Residence Halls
Mudd Hall

B.S., Columbia University; M.S., Iowa State College.

LUCILLE GRAMSE MCCARTHY

Director of Dining Halls
Frary Hall

B.S., M.S., Kansas State College of Applied Science.

H. MAX HUGHS

Superintendent of Buildings and Grounds
987 Dartmouth Street

The Faculty

Date denotes beginning of original term of service

ADMINISTRATIVE OFFICERS

- ELIJAH WILSON LYON 345 College Ave.
President, 1941.
B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; Litt.D., Occidental College.
- FRANCIS RAYMOND IREDELL 1060 College Ave.
Dean of the Faculty, and Professor of Philosophy on the Robert C. Denison Foundation, 1925.
B.A., Pomona College; M.A., Ph.D., Harvard University.
- J. EDWARD SANDERS 739 Harvard Ave.
Dean of Students and Dean of Admissions, 1942.
B.A., Hendrix College; M.A., Ph.D., Columbia University.
- SHELTON L. BEATTY 246 E. Seventh St.
Dean of Men, 1949.
B.A., University of Tennessee; M.A., Cornell University; Doctoral Candidate, Stanford University.
- JEAN B. WALTON 136 E. Seventh St.
Dean of Women on the Martha N. Hathaway Foundation, 1949.
B.A., Swarthmore College; M.A., Brown University; Ph.D., University of Pennsylvania.
- MARGARET MAPLE 4342 Via Padova
Registrar, 1940.
B.A., Pomona College.
- DAVID W. DAVIES 160 E. Foothill Blvd.
Librarian, 1947.
B.A., University of California at Los Angeles; M.A., University of California; Ph.D., University of Chicago.
- MARY C. LOVE³ 220 W. Tenth St.
Reference Librarian, 1929.
B.A., M.A., Stanford University.
- GILBERT S. COLTRIN 455 W. Twelfth St.
College Physician, 1940.
B.A., Pomona College; M.D., University of Rochester. Interne, Resident in Medicine, University of California Hospital; Fellow in Urology, Presbyterian Hospital, New York City; Exchange Fellow in Physiology, University of Kiel, Germany.

EMERITI

- GRACE ELLA BERRY 353 W. Eleventh St.
Emeritus Dean of Women and Associate Professor of Mathematics. 1909.
B.S., M.A., Mount Holyoke College.

- FRANK PARKHURST BRACKETT 11044 Kling St., North Hollywood
Emeritus Professor of Astronomy on the Frank Parkhurst Brackett Foundation and Director of the Observatory. 1888.
 B.A., M.A., Sc.D., Dartmouth College; Sc.D., Pomona College.
- BERNARD CAPEN EWER 706 Indian Hill Blvd
Emeritus Professor of Psychology. 1916.
 B.A., M.A., Brown University; Ph.D., Harvard University.
- MARION JEANETTE EWING 487 W. Sixth St
Emeritus Assistant Librarian. 1912.
 B.A., Olivet College; B.S., Simmons College; M.A., Boston University.
- CHARLES TABOR FITTS 4435 N. Live Oak Drive
Emeritus Professor of Education. 1919.
 B.A., Amherst College; M.A., University of California. Graduate study, Harvard University.
- JESSIE EDITH GIBSON Three Arch Bay, South Laguna
Emeritus Dean of Women on the Martha N. Hathaway Foundation. 1927.
 B.A., University of Idaho; M.A., University of Washington. Graduate study, California and Columbia Universities.
- WILLIAM ATWOOD HILTON 1293 Dartmouth Ave.
Emeritus Professor of Zoology on the Willard George Halstead Foundation. 1905.
 B.S., Ph.D., Cornell University.
- ERNEST E. JONES 905 College Ave.
Treasurer Emeritus. 1909.
 B.A., Pomona College.
- CYRIL JURECKA 163 W. Eleventh St.
Emeritus Assistant Professor of Art. 1932.
 Graduate, Imperial and Royal College of Sculpture, Horice, Bohemia.
- WILLIAM KIRK 705 Indian Hill Blvd.
Emeritus Professor of Sociology on the Henry Snyder Foundation. 1922.
 B.A., Ph.D., Johns Hopkins University.
- ELLIOTT CURTIS LINCOLN 472 W. Tenth St.
Emeritus Professor of English on the Phebe Estelle Spalding Foundation. 1924.
 B.A., Colby College; M.A., State College of Washington and Harvard University.
- RALPH HAINE LYMAN 357 W. Tenth St.
Emeritus Professor of Applied Music, Head of Department of Music. 1917.
 B.A., Grinnell College. Student in voice with Karleton Hackett, William B. Olds, Grant Hadley, Arthur Middleton, Courtland Cooper, Holmes Cowper and other American masters and with Vittorino Moratti in Berlin. D.Mus., Grinnell College.
- HELEN MARBURG 225 E. Eleventh St.
Emeritus Associate Professor of Romance Languages. 1940.
 B.A., University of London; Ph.D., Stanford University.
- BRUCE McCULLEY 210 E. Foothill Blvd.
Emeritus Professor of English Literature. 1921.
 B.A., Hiram College; M.A., University of Chicago; Ph.D., Harvard University.

The Faculty

13

- WILLIAM EVAN NICHOLL 240 E. San Jose
Emeritus Dean of Students. 1919.
B.A., Bellevue College; M.A., Columbia University. Graduate study, Edinburgh University.
- EUGENE WHITE NIXON 3163 Indian Hill Blvd.
Emeritus Professor of Physical Education for Men. 1916.
B.A., Monmouth College; M.A., Columbia University. Graduate study, Illinois and California Universities.
- EVERETT SAMUEL OLIVE South Laguna
Emeritus Professor of Piano. 1923.
B.Mus., Simpson College. Graduate study, Simpson College.
- WILLIAM POLK RUSSELL 540 E. Sixth St.
Emeritus Professor of Mathematics on the Joseph W. Fiske Foundation. 1904.
B.A., M.A., Cumberland University.
- GEORGE STEDMAN SUMNER 305 College Ave.
Emeritus Professor of Economics and Sociology. 1897.
Controller, 1922-1941.
B.A., Pomona College; B.A., Ph.D., Yale University.
- EDWARD TAYLOR 1022 Harvard Ave.
Emeritus Professor of Engineering Mathematics. 1920.
C.E., University of Minnesota; M.A., University of Southern California.
- ROLAND RAY TILESTON 1245 Oak Grove Ave., San Marino
Emeritus Professor of Physics on the Seeley W. Mudd Foundation. 1925.
B.A., M.A., Dartmouth College; D.Sc., Colorado College.

PROFESSORS

- WALTER ALFRED ALLEN 175 E. Twelfth St.
Professor of Musical Theory and Appreciation, 1912.
B.A., Beloit College; B.Mus., Yale University. Associate, American Guild of Organists.
- RAY ERWIN BABER 999 College Ave.
Professor of Sociology on the Henry Snyder Foundation, 1939.
B.A., Campbell College; M.A., Ph.D., University of Wisconsin.
- CARL BAUMANN 460 University Circle
Professor of German, 1931.
Ph.D., University of Basel.
- LYMAN BENSON¹ 455 University Circle
Professor of Botany on the Henry Kirke White Bent Foundation, 1944.
B.A., M.A., Ph.D., Stanford University.
- LOYD A. BOND 234 W. Eighth St.
Professor of Economics on the Stedman-Sumner Foundation, 1948.
B.A., M.A., Ph.D., University of Michigan.

CH'EN SHOU-YI

690 Indian Hill Blvd.

Professor of Chinese Culture, 1941.

B.A., Lingnan University; Ph.D., University of Chicago; Fellow of the Academia Sinica.

JAMES WHITE CROWELL

450 University Circle

Professor of Romance Languages, 1929.

B.S., M.A., Haverford College; Ph.D., Cornell University.

MERRIMON CUNNINGGIM

Professor of Religion on the Nancy M. Lyon and John Knox McLean Foundations, 1946.

B.A., Vanderbilt University; M.A., Duke University; B.A., University of Oxford; B.D., Ph.D., Yale University.

HAROLD DAVIS

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Professor of English on the Phebe Estelle Spalding Foundation, 1927.

B.A., Stanford University; B.A. and B.Litt., University of Oxford.

ROBERT SIDNEY ELLIS

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Professor of Psychology, 1931.

B.A., University of Arkansas; Ph.D., Clark University.

KENNETH G. FISKE

238 E. Seventh St.

Professor of Music, 1936.

B.Mus., M.Mus., American Conservatory of Music. Pupil of Leon Sametini, Jacques Gordon, Otokar Sevcik.

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256 E. Second St.

Professor of Physics on the Seeley W. Mudd Foundation, 1947.

B.A., M.S., University of Utah; Ph.D., University of California.

JOHN HOWES GLEASON

512 Baughman Ave.

Professor of History on the Warren Finney Day Memorial Foundation, 1939.

B.A., Ph.D., Harvard University; B.Litt., University of Oxford.

CHARLES MAXFIELD HARSH

Professor of Psychology, 1950.

B.S., California Institute of Technology; M.A., Ph.D., University of California.

HUBERT HERRING²

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Professor of Latin American Civilization, 1945.

B.A., Oberlin College; M.A., Columbia University; Graduate, Union Theological Seminary.

ERNEST R. HUGHES

Visiting Professor of Chinese Culture, 1950.

B.A., and M.A., University of Oxford

MARGARET HUSSON

1250 Amherst Ave.

Professor of Spanish, 1925.

B.A., University of Kansas; M.A., Columbia University. Graduate study, centro de Estudios Históricos, Madrid.

The Faculty

15

- FRANCIS RAYMOND IREDELL 1060 College Ave.
Professor of Philosophy on the Robert C. Denison Foundation, and Dean of the Faculty, 1925.
 B.A., Pomona College; M.A., Ph.D., Harvard University.
- CHESTER GEORGE JAEGER 1045 Yale Ave.
Professor of Mathematics on the Joseph N. Fiske Foundation, 1931.
 B.A., B.S., M.A., Ph.D., University of Missouri.
- WILLIAM THOMAS JONES 4201 Via Padova
Professor of Philosophy, 1938.
 B.A., Swarthmore College; B.Litt., University of Oxford; Ph.D., Princeton University.
- GEORGE KARO 203 E. Sixth St.
Visiting Professor of Greek and Roman Art and Archaeology, 1948.
 Student, University of Munich; Ph.D., University of Bonn.
- JOHN HASKELL KEMBLE Smiley Hall
Professor of History, 1936.
 B.A., Stanford University; M.A., Ph.D., University of California.
- CARL GEORGE PARRISH 338 Harvard Ave.
Professor of Music, 1949.
 B.Mus., MacPhail School of Music; M.A., Cornell University; Ph.D., Harvard University.
- WILLIS CONWAY PIERCE 145 E. Eleventh St.
Professor of Chemistry on the Carnegie Foundation, 1945.
 B.S., D.Sc., Georgetown College; M.S., Ph.D., University of Chicago.
- BENJAMIN DAVID SCOTT 828 College Ave.
Professor of Public Address, 1923.
 B.A., University of Southern California; S.T.B., Ph.D., Boston University. Graduate work, Brown and Harvard Universities.
- ERNEST ALBERT STRATHMANN 160 W. Eleventh St.
Professor of English, 1932.
 B.A., M.A., Ph.D., Johns Hopkins University.
- ROBERT LOBINGIER STREHLE 1019 Dartmouth Ave.
Professor of Physical Education for Men, 1923.
 B.A., Pomona College; M.A., Claremont Graduate School; Graduate study, University of Southern California, University of California, Stanford University.
- MERLIN O. TRYON
Professor of Military Science and Tactics, 1950.
 B.A., Arizona State College; Graduate, Basic and Advanced Infantry Schools; Lt. Colonel, Infantry, United States Army.
- JOHN ALBERT VIEG 435 W. Eighth St.
Professor of Government, 1945.
 B.A., St. Olaf College; M.A., University of Iowa; Ph.D., University of Chicago.

WALTER TICKNOR WHITNEY

Professor of Astronomy on the Frank P. Brackett Foundation and Director of the Observatory, 1929.

B.S., M.S., Pomona College; Ph.D., University of Chicago.

445 W. Tenth St

ALFRED OSWALD WOODFORD

Professor of Geology, 1915.

B.A., Pomona College; Ph.D., University of California.

443 W. Tenth St

ASSOCIATE PROFESSORS

VIRGINIA PRINCEHOUSE ALLEN

Associate Professor of Dramatics, 1930.

B.A., Pomona College; Graduate study, Department of Drama, Yale University; M.A., Claremont Graduate School.

175 E. Twelfth St

JOSEPH WARNER ANGELL

Associate Professor of English, 1939.

B.A., College of Wooster; M.A., University of Oregon; Doctoral Candidate, Yale University.

202 N. College Ave

WILLIAM G. BLANCHARD

Associate Professor of Music and College Organist, 1936.

B.Mus., DePauw University; M.Mus., University of Michigan. Further study with Carl Weinrich and Hugh Porter in organ and with Seth Bingham in composition.

1495 Via Zurita

FREDERICK BRACHER³

Associate Professor of English, 1944.

B.S., Oregon State College; M.A., Ph.D., University of California.

ELIZABETH CAWTHORNE

Associate Professor of Physical Education for Women, 1935.

B.A., M.A., University of California.

228 Harvard Ave

DARYL DAYTON

Associate Professor of Music, 1938.

B.Mus., Oberlin College; Graduate study in Berlin and New York with Artur Schnabel, Leonard Shure, Dalies Frantz, and Guy Maier.

262 W. Sixth St

KENNETH E. FOSTER

Associate Professor of Art, 1946.

B.S., Northwestern University; Ph.D., New York University.

1100 Harvard Ave

EDWARD MONTGOMERY FRYER

Associate Professor of Physics, 1946.

B.A., Pomona College; M.E., Ph.D., Stanford University.

271 E. Eighth St

HUGH J. HAMILTON

Associate Professor of Mathematics, 1936.

B.A., University of California at Los Angeles; M.A., Ph.D., Brown University.

735 Yale Ave

The Faculty

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- CORWIN HERMAN HANSCH 129 E. Sixth St.
Associate Professor of Chemistry, 1946.
B.S., University of Illinois; Ph.D., New York University.
- COLVIN HEATH 750 Indian Hill Blvd.
Associate Professor of Physical Education for Men, 1922.
B.A., Pomona College; M.A., Stanford University.
- CHARLES SHIVELEY HOLMES 1245 Dartmouth Ave.
Associate Professor of English, 1941.
B.A., Oberlin College; Ph.D., Princeton University.
- LUTHER JAMES LEE, JR. 1030 Dartmouth Ave.
Associate Professor of Government, 1941.
B.A., Pomona College; M.A., Ph.D., University of California.
- MILES D. MCCARTHY 147 W. Sixth St.
Associate Professor of Zoology, 1946.
B.S., West Chester State Teachers College; Ph.D., University of Pennsylvania.
- EARL JAY MERRITT 1865 E. Foothill, Glendora
Associate Professor of Physical Education, 1925.
B.A., Pomona College; M.A., Claremont Graduate School.
- HENRY CORD MEYER 260 E. Third St.
Associate Professor of History, 1946.
B.A., University of Colorado; M.A., University of Iowa; Ph.D., Yale University.
- FREDERICK LUDWIG MULHAUSER, JR. 146 E. Dartmouth Pl.
Associate Professor of English, 1941.
B.A., College of Wooster; M.A., Ph.D., Yale University.
- WILLIS E. PEQUEGNAT 433 Harrison Ave.
Associate Professor of Zoology on the Willard George Halstead Foundation, 1940.
B.A., University of California; Ph.D., University of California at Los Angeles.
- DWIGHT LEONARD RYERSON 107 E. San Jose
Associate Professor of Zoology, 1946.
B.A., M.S., University of Arizona; Ph.D., University of California at Los Angeles.
- R. NELSON SMITH 145 E. Sixth St.
Associate Professor of Chemistry, 1945.
B.A., Pomona College; M.A., Ph.D., Stanford University.
- JOHN ROBERT VON ROHR 1111 Harvard Ave.
Associate Professor of Religion, 1945.
B.B.A., University of Minnesota; B.D., Chicago Theological Seminary; Ph.D., Yale University.
- EMILIE ELIZABETH WAGNER 650 Indian Hill Blvd.
Associate Professor of German, 1928.
B.A., Smith College; M.A., Pennsylvania State College. Doctorate de l'Université mention Lettres, Toulouse.

ASSISTANT PROFESSORS

MARGERY SMITH BRIGGS

420 Baughman Ave.

Assistant Professor of Music, 1943.

B.Mus., B.Mus.Ed., M.Mus., Chicago Musical College.

KAREN BURT

14569 E. Teton Dr., Puente

Assistant Professor of Physical Education for Women, 1943.

B.E., University of California at Los Angeles; M.A., University of Southern California.

CHARLES C. JOHNSON

449 Elder Drive

Assistant Professor of Military Science and Tactics, 1949.

B.S., Washington State College; Graduate, Advanced Infantry School. Captain, Infantry, United States Army.

GORDON CANFIELD LEE

1035 Columbia Ave.

Assistant Professor of Education, 1948.

B.A., University of California; M.A., Ph.D., Columbia University.

GRETCHEN GRAF PAHL

353 W. Eleventh St.

Assistant Professor of English, 1947.

B.A., M.A., Ohio State University; Ph.D., University of California at Los Angeles.

LOUIS B. PERRY

Eli P. Clark Hall

Assistant Professor of Economics, 1947.

B.A., M.A., Ph.D., University of California at Los Angeles.

EDWIN ALLEN PHILLIPS

137 N. College Ave.

Assistant Professor of Botany, 1948.

B.A., Colgate University; M.A., Ph.D., University of Michigan.

ALVIN HEWITT SCAFF

670 S. College Ave.

Assistant Professor of Sociology, 1947.

B.A., University of Texas; B.D., Chicago Theological Seminary; M.A., Ph.D., University of Texas.

JOHN SEWALL SHELTON¹

1100 Oxford Ave.

Assistant Professor of Geology, 1946.

B.A., Pomona College; Ph.D., Yale University.

ELMER B. TOLSTED

Assistant Professor of Mathematics, 1947.

B.S., M.S., University of Chicago; Ph.D., Brown University.

EDWARD WEISMILLER

814 Dartmouth Ave.

Assistant Professor of English, 1949.

B.A., Cornell College; M.A., Harvard University; Doctoral Candidate, University of Oxford.

INSTRUCTORS

GERTRUDE AMLING³

Instructor in Physical Education for Women, 1944.
B.A., Pomona College; M.A., Claremont Graduate School.

THOMAS B. BELL

417 E. Cucamonga Ave.

Instructor in Physical Education for Men, 1947.
B.A., M.A., University of California.

GEORGE F. BREAK

134 E. Seventh St.

Instructor in Economics, 1949.
B.Com., University of Toronto; Doctoral Candidate, University of California.

HARRY JOSEPH CARROLL, JR.

132 E. Seventh St.

Instructor in Classics, 1948.
B.A., University of Akron; M.A. and Doctoral Candidate, Harvard University.

FREDRYC R. DARBY

Instructor in Government, 1949.
B.A., M.A., Occidental College; Doctoral Candidate, University of California.

BURTON HENKE

153 E. Sixth St.

Instructor in Physics, 1948.
B.A., Miami University; M.A. and Doctoral Candidate, California Institute of Technology.

BORIS ILYIN

145 W. Seventh St.

Instructor in English, 1949.
B.A., University of California; M.A., Stanford University.

MARGOT JEAN

224 S. Doheny Dr., Beverly Hills

Visiting Instructor in Violoncello, 1946.
Pupil of Jacob at the Royal Conservatoire in Brussels.

KARL GEORGE KOHN

Instructor in Music, 1950.
Studied piano in Vienna; Teacher's Certificate and Artist Diploma, New York College of Music; Student, Harvard University.

VINCENT H. LEARNIHAN

Instructor in History, 1949.
B.A., M.A., Doctoral Candidate, University of California at Los Angeles.

RICHARD N. LOUCKS³

Instructor in Music, 1948.
B.A., Pomona College; M.A. and Doctoral Candidate, Eastman School of Music.

RICHARD W. LOUNSBURY

Instructor in Geology, 1950.
B.A., University of Chicago; Doctoral Candidate, Stanford University.

EDWARD W. MALAN

Instructor in Physical Education for Men, 1950.

B.A., Pomona College; M.A., Claremont Graduate School.

DENISE OBRECHT

French House

Instructor in French, 1950.

License ès-lettres and Diplôme d'Études Supérieures, University of Strasbourg; Candidate for Doctorat de l'Université, University of Paris.

ROBERT WARNER OLIVER

Instructor in Economics, 1950

B.A., M.A., University of Southern California; Doctoral Candidate, Princeton University.

ROBERT E. ORNER

4564 Finley Ave., Los Angeles

Visiting Instructor in Woodwind Instruments, 1948.

B.Mus., M.Mus., Eastman School of Music.

WOODROW WILSON SAYRE

780 N. Mountain Ave.

Instructor in Philosophy, 1948.

B.A., Williams College; M.A., and Doctoral Candidate, Harvard University.

MAXINE J. SHURTZ

147 W. Sixth St.

Instructor in Physical Education for Women, 1947.

B.A., Miami University; M.S., Wellesley College.

LAUREL W. SIMPSON

383 Randolph St., Pomona

Visiting Instructor in Band, 1948.

B.A., Pomona College; M.A., Candidate, Claremont Graduate School.

IRMA SOONG

Instructor in Oriental Affairs, 1950.

B.A., Yenching University; M.A., Mills College.

SALLY ANNE TAYLOR

Instructor in Physical Education for Women, 1950.

B.A., Pomona College; M.A. candidate, Stanford University.

ROBERT KINGSTON VICKERY

Instructor in Botany, First Semester, 1950-51.

B.A., M.A., and Doctoral Candidate, Stanford University.

EDGAR F. VOM LEHN

346 Harvard Ave.

Instructor in Music, 1949.

B.A., Princeton University; M.A., University of North Carolina.

The Faculty

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GREGORY BAKER WOLFE

228 N. College Ave.

Instructor in Government, 1948.

B.A., Reed College; M.A., and Doctoral Candidate, Fletcher School of Law and Diplomacy.

JAMES MILFORD ZORNES

719 W. Third St.

Instructor in Art, 1947.

California Landscape Artist; Artist with American Army in China-Burma-India Theatre.

LECTURERS

JAMES H. BLOCK, JR.

444 S. College Ave.

Lecturer in Astronomy, 1950.

B.A., Pomona College; M.A., Claremont Graduate School.

KARL C. DARLINGTON

232 W. Fifth St.

Lecturer in Economics, 1947.

B.A., Pomona College.

SCOTT C. GRAY

124 W. Ninth St.

Lecturer in Psychology, 1949.

B.S., Purdue University; M.A. Candidate, Claremont Graduate School.

LEWIS GRIMM

2147 S. San Antonio Ave., Pomona

Lecturer in Engineering Drawing, 1947.

B.S., California Institute of Technology; Graduate Study, Claremont Graduate School.

CHARLES B. LAWLER

3560 Padua Ave.

Lecturer in Sculpture, 1949.

B.A., University of California. Studied under Charles Malfray in Paris, California School of Fine Arts, San Francisco, and Alexander Archipenko.

HELEN M. SMITH

120 W. Third St.

Lecturer in Music, 1949.

B.A., Pomona College.

¹Absent on leave, first semester, 1950-51.

²Absent on leave, second semester, 1950-51.

³Absent on leave, 1950-51.

FACULTY COMMITTEES 1950-1951

First person named is the Committee Chairman

Administration—President, Dean of the Faculty, Sanders, Pierce, Kemble, Scott, Ryerson, von Rohr.

Admission—Sanders, Walton, Crowell, Maple, Fryer.

Athletic Council—Strehle, Cuninggim, Fryer, three student representatives, and two alumni representatives.

Pomona College representatives on the Southern California Intercollegiate Athletic Conference—Jaeger, Strehle.

Classification—Maple, Sanders, Jones, Smith, Ryerson.

Student Affairs—Sanders, Beatty, Cuninggim, Jaeger, Walton, Phillips, Scaff, and four members of the Executive Council of the Associated Students.

Courses of Study—Iredell, Bond, Strathmann, Parrish, Husson, Maple, Sanders, Foster, Kemble, Fowler, Vieg, Pierce, Pequegnat, Harsh, Gleason.

English—Pahl, Henke, Hamilton.

Library—Gleason, Davies, Bond, Parrish, McCarthy, Angell, Hamilton.

Personnel—Sanders, Walton, Maple, Perry, Beatty, Harsh, and three student representatives selected by the Executive Council of the Associated Students.

Public Events—Iredell, Luther Lee, Scott, Parrish, Meyer, Hansch, Kemble.

Religious Activities—Cuninggim, Scott, Scaff, Vieg, von Rohr, Shelton, Sayre, Co-presidents of Christian Association.

Scholarships and Student Aid—Sanders, Walton, Meyer, Baber, Smith, Strehle, Beatty.

Vocational Counseling and Placement—Beatty, Perry, Walton, Sanders, Maple, Pequegnat, Cawthorne, Wheaton, Gordon Lee.

The College

POMONA COLLEGE is an independent, privately endowed, coeducational institution of arts and sciences. Originally established in 1887 to serve its immediate region, the college now enjoys support from every section of the United States.

The College owes its inception to early settlers in Southern California whose previous affiliations led them to the founding of a "Christian College of the New England type." Under the leadership of the Reverend Charles B. Sumner, a devoted and self-sacrificing group were appointed members of the first Board of Trustees by the General Association of Congregational Churches of Southern California. The original trustees were: Henry K. W. Bent, Nathan W. Blanchard, Anson Brunson, Elwood Cooper, James T. Ford, James H. Harwood, Dexter D. Hill, Theodore C. Hunt, George W. Marston, John K. McLean, Henry A. Palmer, Seth Richards, Charles B. Sheldon, Charles B. Sumner, and Andrew J. Wells.

With the freedom characteristic of Congregational organization, the College soon made itself the servant of a wider Christian fellowship. Today the Board of Trustees is a self-perpetuating body, free from ecclesiastical control but pledged under its charter to maintain the institution as truly Christian, though nonsectarian. Conscious of its heritage, the College gives every encouragement to both the study and practice of religion by its students. Within the curriculum the department of religion offers general courses designed for all students, and more specialized work for those desiring to concentrate in religion. Church and chapel services and the work of the Christian Association emphasize the place of religious thought and activity in the life of the campus.

The College was incorporated October 14, 1887, and instruction was begun in September, 1888, in a small rented house in the city of Pomona. The following January an unfinished hotel in Claremont (now Sumner Hall), together with considerable land adjacent, was given to the College and the work was transferred to that place. Although this location was originally regarded as temporary, Claremont later became the permanent home of the College. By that time, however, the name of "Pomona College" had become so definitely fixed to the institution that it was retained, notwithstanding the location.

The College met a need for higher education in Southern California, and after the initial years its growth was constant. The first class was graduated in 1894, at which time the total number of college students was forty-seven. The preparatory department, essential in the beginning, was discontinued in 1910.

Enrollment at Pomona College is restricted to approximately one thousand students, divided equally among the four classes. During the academic year 1949-50, there were enrolled 611 men and 459 women.

Pomona is a liberal arts college, which affords a full academic program in the social sciences, the natural sciences, and the humanities. The curriculum is planned to give a comprehensive understanding of society rather than technical training in highly specialized fields. The College believes that the best preparation for life is liberal education, and it aspires thus to train men and women for professional, business, and civic leadership.

From its foundation the College has emphasized the highest standards of scholarship, both in its program and in the selection of its students. Pomona's devotion to scholarship received national recognition as early as 1914, when the College was awarded a chapter of Phi Beta Kappa. Since 1924 the College has given further impetus to academic achievement by offering an honor type of instruction which affords opportunities for independent study to outstanding students.

The College recognizes that a primary requisite in the promotion of high scholarship is the intimate contact of students and faculty. Pomona maintains a large faculty in relation to its student body and constantly seeks to promote close relations between students and instructors. During 1950-51 the college will have a faculty member for every ten students enrolled. Elementary courses are divided into sections small enough to provide opportunity for discussion. In their upper division courses students have abundant opportunity for individual attention.

Pomona believes that the highest values of a liberal education can be attained best in a residence college. Through the efforts of its Trustees the College now possesses one of the finest groups of dormitories and dining halls to be found in the country. Approximately 800 students can be accommodated in the dormitories, and all students except the small group staying at home take their meals in the college dining halls.

The College owes the development of the campus and the growth of its financial resources to the generosity of patrons, friends, and alumni. As an independent institution, without assistance from any governmental or church body, Pomona must rely upon gifts for the expansion of its program and for the increase of its endowment, upon which depends the financial strength of the college. From the contributions of her benefactors the total assets of Pomona now surpass \$10,800,000, of which \$5,496,432.20 is in endowment.

THE ASSOCIATED COLLEGES

Pomona College is the original institution in a group of four Associated Colleges, of which the other members are Claremont College, Scripps College, and the Claremont Men's College. Although each college is autonomous and independently controlled by its own Board of Trustees, the four institutions cooperate in their academic programs and in use of certain common facilities.

The group, which represents a combination of English and American practices, arose from the desire of Pomona College to maintain for itself the advantages of a small college and at the same time to provide at Claremont an educational opportunity for the increasing numbers of young men and women who at the end of World War I were seeking admission to the College.

Under the leadership of the Pomona trustees, the institution now incorporated as Claremont College was established on October 14, 1925, for the inauguration of the new plan. It assumed responsibility of acting as a central coordinating agency, the direction of graduate instruction for the Associated Colleges, and the foundation of new institutions as they might be required. Claremont College conducts its instructional program under the name of "The Claremont Graduate School," and the presidents of the undergraduate colleges, in addition to their duties in their respective colleges, serve in rotation for two year terms as head of Claremont College with the title of Provost. In addition to its own appointees the faculty of the Claremont Graduate School includes most members of the three undergraduate faculties.

An early objective of the group plan was the establishment of a college for women. In September, 1927, Scripps College, named in honor of Miss Ellen Browning Scripps, whose generosity and vision made it possible, was opened as a residence college for 225 women.

From the beginning the main feature of its curriculum has been unified sequence of courses in the humanities.

Claremont Men's College, the third undergraduate institution was established in 1946 as a liberal arts college training particularly for business and public administration. The College is developing residence and academic facilities for approximately 300 students.

The four colleges cooperate in their academic programs and thus afford for their students many of the advantages of a university center. The undergraduate colleges open their classes without tuition charges to students in the other undergraduate institutions. Selected courses in the Claremont Graduate School are open to seniors at Pomona, Scripps, and Claremont Men's College.

The colleges maintain a common business office and a joint health service which includes the full time services of a physician and the operation of a thoroughly up-to-date infirmary. A joint library service purchases and catalogues books for the three libraries. Bridges Auditorium, which seats 2600, is administered by Claremont College for the group.

CLAREMONT

One of Pomona's greatest assets is Claremont, the academic community of 4600 that has grown up around the college. The early settlers were New Englanders and they gave to Claremont an atmosphere unusual on the Pacific Coast.

With the growth of Pomona and the foundation of the other associated colleges the village has come to be a cultural center of unusual significance. Three private preparatory schools are now located in Claremont. Under the auspices of the Congregational Church, Pilgrim Place, a community for retired ministers and missionaries, was founded in 1915. Each winter the village entertains a number of visitors who come to enjoy the climate and the beauty of citrus groves beneath towering, snow-capped mountains.

Although Pomona College students enjoy in Claremont the charm and intimacy of a New England village, they are in no sense isolated from the life of Southern California, for the college is only four miles from Pomona, a city of over 35,000 inhabitants and thirty-five miles from Los Angeles, with which it has hourly bus connections. Claremont is on the main line of the Santa Fe Railway, and the transcontinental lines of the Union Pacific and the Southern Pacific pass through the city of Pomona.

The Campus

POMONA COLLEGE occupies about one hundred and twenty acres, of which sixty are included in Blanchard Park, the gift of Nathan W. Blanchard, about ten in Alumni Athletic Field, and fifty in the campus proper. The College centers on Marston Quadrangle, built and endowed by George W. Marston, 1850-1946, distinguished citizen of San Diego, an original trustee of Pomona and for many years president of the board.

The twenty-six buildings on the campus are heated from a central plant which serves the four colleges.

ADMINISTRATION AND CLASSROOM BUILDINGS

Mary L. Sumner Hall, a hotel which in 1889 became the original building of the college, was removed from its first site in 1922, remodeled for administrative and faculty uses, and named in memory of the wife of Rev. Charles B. Sumner, LL.D., one of the Founders of Pomona College.

Holmes Hall, the first academic building erected by the college in 1893, is a memorial to Cyrus W. Holmes, Jr., of Monson, Massachusetts. Reconstructed in 1916 in conformity with more modern plans for buildings and campus, it is now devoted to recitation rooms, departmental offices, and an auditorium seating 750.

The Associated Colleges maintain a joint Business Office in Harper Hall, constructed in 1931.

ART AND MUSIC BUILDINGS

Rembrandt Hall, built in 1914, is devoted to the Department of Art. The upper floor contains studio and work rooms; the lower floor two galleries, one of which was added in 1937.

The Mabel Shaw Bridges Hall of Music, given by Mr. and Mrs. Appleton S. Bridges of San Diego in 1915, in memory of their daughter who died while a student at Pomona College, offers excellent facilities for the study of music. It contains, in addition to private studios, an unusually beautiful auditorium seating 800.

The Mable Shaw Bridges Auditorium, also the gift of Mr. and

Mrs. Appleton S. Bridges in memory of their daughter, was constructed in 1931. It has a seating capacity of 2600, and is administered by Claremont College on behalf of the Associated Colleges.

The Open-Air Theatre, built in 1910, takes advantage of the natural beauty of Blanchard Park.

SCIENCE BUILDINGS

Pearsons Hall of Science, the gift of Dr. D. K. Pearsons in 1899, contains the laboratories and lecture rooms of the Departments of Physics and Mathematics.

The Frank P. Brackett Observatory, the gift of Mr. Llewellyn Bixby, '01, has served the Department of Astronomy since 1908.

The Seaver Laboratory, a separate building in the Observatory area, was completed in 1950. The dome houses the Clara Whitne Shatto Reflector Telescope, and the main floor contains classroom and a library.

Harwood Hall, given in 1915 by Mr. A. P. Harwood, contains lecture rooms and laboratories for the use of the Department of Psychology.

The Mason Hall of Chemistry, the gift of Mr. W. S. Mason in 1922, provides ample facilities for the study of Chemistry, and also houses the Department of Geology.

The Crookshank Hall of Zoology, given in 1922 by Dr. D. C. Crookshank, is occupied by the Departments of Botany and Zoology.

THE LIBRARY

The Library, the gift of Mr. Andrew Carnegie, was constructed in 1908, and underwent extensive renovation in the summer of 1941. Its reading rooms accommodate 350 readers. Except for the special science collections, all books and bound periodicals are housed in the main library.

RESIDENCE AND DINING HALLS FOR MEN

The Albert K. Smiley Hall, the first dormitory for men, built in 1908, accommodates seventy-two students and one instructor.

The Eli P. Clark residence unit for men, erected in 1929, includes three dormitories with accommodations for 290 students.

Frery Dining Hall for Men, given by Mr. George W. Marston in 1929 in memory of Rev. Lucien H. Frery, a Trustee from 1892 to 1903, seats 375 in the main hall and includes three smaller dining rooms for special uses.

Further accommodations are available for both single and married men in fifty-two apartments originally given to the college by the United States government for use of veterans.

RESIDENCE AND DINING HALLS FOR WOMEN

Harwood Court, constructed in 1921 and named in memory of Mrs. Charles E. Harwood, and which also includes Strong Hall, accommodates 180 women.

Florence Carrier Blaisdell Hall, erected in 1936 and named in honor of Mrs. James A. Blaisdell, wife of the fourth President of the College, houses 120 women.

Della Mulock Mudd Hall, which honors the wife of the late Leeley W. Mudd, a Trustee of Pomona, was completed in the spring of 1947. The building has accommodations for 100 women, most of them in single rooms.

The College also maintains two houses as residences for women, the Casa Española and the Maison Française, which are reserved for students majoring in Spanish and French.

Beautiful and commodious dining facilities are available for all women students. Residents of Harwood Court are served by the Aurelia Squier Harwood Memorial Dining Hall built in 1931.

Since September, 1949, students living in Blaisdell Hall and Mudd Hall have taken their meals in the new Jessie E. Gibson Dining Hall connecting these buildings.

EDMUNDS UNION

The Charles K. Edmunds and Katharine P. Edmunds Student Union, which honors the late fifth President of the College and his wife, provides a social center for all students and an attractive ballroom in which all formal dances are held. This building, made possible by the gifts of many parents supplemented by funds from the Associated Students and the bequest of the late Florence Wiley, was built in 1937 and houses student offices, including publications, the graduate manager's office, and the Cooperative Store.

HEALTH FACILITIES

Memorial Infirmary, given in 1931 in memory of Colonel Seely W. Mudd, is administered by Claremont College and is operated jointly for the benefit of students in all the Associated Colleges at Claremont. Twenty-four beds are available. The Infirmary is situated on Amherst Avenue, north of Foothill Boulevard.

A jointly operated Medical Dispensary, located at 241 East 8th Street, provides an office where the College Physician and nurse are available for daily consultation and treatment for minor ailments.

ATHLETIC FACILITIES

The War Memorial Gymnasium, given to the college by student alumni, trustees, and friends, commemorates the men and women of Pomona College who gave their lives in World War I and World War II. Begun in January, 1950, the Memorial Gymnasium will be ready for use with the opening of college in September. The building includes an excellent basketball court with seating for 1300 spectators, a classroom, a memorial library, staff offices, and commodious shower and locker rooms.

The Memorial Training Quarters, constructed in 1922 as a memorial to the men of Pomona College who lost their lives in World War I, has been incorporated as the east wing of the new Memorial Gymnasium. It represents the gift of the parents of one of these men, Sheldon Gerry, '17, supplemented by the gifts of alumni, students, and friends. Among other facilities the Training Quarters contain dressing rooms for swimming for both men and women, and the freshman locker rooms.

Alumni Field, consisting of about ten acres, has been developed by the alumni into athletic grounds admirably equipped and unsurpassed in the Southwest in beauty of setting. First-class tennis courts, an excellent track, baseball and football fields, also hockey and basketball courts are within the limits of the campus.

A swimming pool, of the standard size for water polo, and fully equipped with modern appliances, is open to both men and women for instruction and recreation throughout the year.

The William Renwick Gymnasium, named in memory of an early donor to the college, contains the original Pomona College Gymnasium built in 1899, and a larger building first erected as

military barracks in World War I. The two buildings now joined together provide an excellent basketball court and general facilities for the women's department of physical education.

OTHER FACILITIES

The President's House at 345 North College Avenue was the gift of Dr. D. K. Pearsons. It was constructed in 1897, and has been the home of all Presidents of the College since that time.

A replica of the original house in Pomona in which the College first opened in September, 1888, was erected on the campus in 1937 through the generosity of an anonymous donor. It contains a historical exhibit set up in recognition of the College's Fiftieth Anniversary, and will become ultimately a museum of Pomoniana.

The College operates its own independent deep well water supply, the gift of Edward P. and Mary G. Bosbyshell.

THE CLAREMONT INN

The Claremont Inn, beautifully located on College Avenue opposite the campus since 1906, is the guest house of the colleges and community, and is owned and operated by Pomona College. Parents and friends are invited to use the facilities of the Inn for longer or shorter periods during visits to Claremont. Public and private dining rooms and accommodations for sixty guests under both the American and European plans are provided. Students who do not return home during vacation periods find the Inn a convenient vacation home. The hospitality of the Inn expresses the friendliness of the colleges and the community.

Admission

STUDENTS ARE ADMITTED to Pomona College upon evidence which satisfies the Committee on Admissions that: (1) the applicant possesses the necessary preparation and ability to carry successfully the academic program offered here, and will actually use them to that end; (2) the College, with its program and traditions, and the applicant, with his capacities, interests and needs, are mutually well suited to each other.

The Committee tends to judge the fitness of an applicant in terms of reasonably definite academic prerequisites but it makes every effort to form judgments on the basis of the total picture rather than in terms of narrowly technical requirements.

Any person interested in preparing for Pomona, or any school official who is responsible for directing the preparatory program of students is invited to call on the Dean of Admissions at any time regarding the acceptability of candidates or for advice on specific programs.

For further information, write to Office of Admissions, Sumner Hall, Pomona College, Claremont, California.

ADMISSION TO FRESHMAN STANDING

The College does not require any particular pattern of secondary school courses, but assumes candidates will have taken a college preparatory course. Under ordinary circumstances they are advised to complete at least three years of satisfactory study in English. Two years of mathematics are advised for all candidates. Those who plan to study mathematics or the physical sciences in college should have at least three years or more, preferably including trigonometry. (See page 78.) Foreign language credit is not required for admission but for concentration in many fields a reading knowledge of at least one foreign language is essential. It is much to the advantage of a student to begin the acquisition of this knowledge before entering college. Two or three years in social studies and two or three in sciences are also advised. The major attention is given to the quality of preparation rather than to the exact arrangement of subjects.



Eli P. Clark Residence Hall for Men



near the Reflector Telescope

It is normally assumed that candidates will have received a high school diploma. Students from foreign countries or those who submit records showing unusual patterns of preparation may submit other evidences of their readiness to undertake college work. All freshman candidates are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board. This requirement does not lessen the importance of the school record, the personal ratings and personal interviews. The test results will be used in the academic advising of freshmen and replace some of the aptitude tests previously given during the registration period. (See page 36 for further information.)

It is recommended that applications be filed at the beginning of the senior year in high school. The Scholastic Aptitude Test should be taken either in January or in March and the candidate responsible for registering for this with the College Entrance Board. The regular selection of new students will be made from applications received on or before March 10, provided candidates have taken the Scholastic Aptitude Test in March or earlier.

Applications will be accepted between the dates of March 10 and May 1 from candidates who have already taken the Scholastic Aptitude Test or who plan to take it on May 19 but there is no assurance that there will still be vacancies at that time. These applications will be acted upon early in June.

ADMISSION TO ADVANCED STANDING

In considering applications for advanced standing the College follows the general policy used for freshman candidates. It requires honorable dismissal from the previously attended institution with an average grade of C or better in liberal arts type of courses taken in accredited collegiate institutions, together with recommendations from the proper college officials. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. The transcript must show the record in all secondary as well as all collegiate institutions attended. Credit allowed for work taken in other institutions will be determined by the Classification Committee after the candidate has been accepted.

ADMISSION TO SPECIAL CLASSIFICATION

Mature students, particularly those equipped for advanced studies in special departments, may be admitted as special students to

courses for which, by ability and preparation, they may be fitted. Special students are not candidates for a degree, though students admitted to this classification may be accepted later as candidates for a degree.

THREE YEAR PROGRAM FOR JUNIOR COLLEGE GRADUATES

To enable junior college graduates and others who enter with advanced standing to continue their education on the basis of a three-year program leading to the Master's degree as well as to the Bachelor's degree, Pomona College and the Claremont Graduate School have planned their offerings so that the closest articulation of undergraduate and graduate study is possible.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from Massachusetts Institute of Technology after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona. For detailed program see page 78.

APPLICATION PROCEDURE

Application for admission to Pomona College must be made on the form furnished by the college and all credentials must be filed with the Committee on Admissions. The forms and credentials required are:

1. *Application Form I.* Including \$5.00 fee, which is not refundable. Make checks or money orders payable to Pomona College.
2. *Two Personal Rating Scales, Form II.* Confidential reports by the principal or other school official, and by a class-room teacher, sent by them to the Committee on Admissions.
3. *A Statement of Qualifications.* The Committee seeks the most complete possible picture of each candidate and to this end requires a personal, autobiographical statement to supplement the other information. Some or all of the following points

may be discussed although the candidate need not consider this an outline to be followed: (1) your preparation or background for college other than that which will be evident from your school record; (2) your major aptitudes and interests either of an academic or non-academic nature; (3) your purposes in going to college; (4) your particular reasons for choosing Pomona College. It is permissible to discuss the paper with others but the writing, both as to ideas and the form in which they are expressed, must be the candidate's. The letter may be typed if the candidate wishes. The length should not exceed 1,000 words.

Official Transcript of high school record to date. At the time of selection of candidates, work in progress will be considered in fulfillment of requirements, and admission will be granted subject to the filing of a final transcript showing the satisfactory completion of all secondary school work. The transcript form ordinarily used by the school is satisfactory. It should include an interpretation of the grading system. It should not be sent until the first half of the senior year has been completed.

(In addition to the above, the Scholastic Aptitude test of the College Entrance Examination Board must be taken.)

Medical Certificate, signed by a licensed M.D., on a form furnished by the college after admission has been granted provisionally. The college reserves the right to reject students for health reasons.

Room Deposit of \$50 due within thirty days of date of acceptance. This deposit will be held until the student's final semester, at which time it will be credited on the semester fees. No refund of the room deposit will be made if a student withdraws before entrance.

Failure to make this payment results in the removal of the candidate's name from the reserved list. Candidates on the alternate list for whom places are not provided will have the entire deposit refunded.

In addition to the procedure noted above, a candidate for admission to advanced standing must file an official transcript of all college work for which he has been previously registered and a statement of honorable dismissal from the institution last attended.

SCHOLASTIC APTITUDE TEST

All candidates for admission to freshman standing are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board and are held responsible for making application to the Board. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. Students who plan to enter in September are advised to take the test in December, January or March. Either of the three dates is equally satisfactory.

The College Entrance Examination Board will hold five complete series of examinations for 1950-51. Application to take an examination must be filed three weeks in advance of the examination date. The schedule for the examinations with the dates of registration is as follows:

Examination Date

December 2, 1950

January 13, 1951

March 10, 1951

May 19, 1951

August 15, 1951

Final Date for Registering

November 11, 1950

December 23, 1950

February 17, 1951

April 28, 1951

July 25, 1951

Applicants are required to take the Scholastic Aptitude Test only for admission to Pomona College. It is not necessary to take the Achievement Tests.

Copies of the Bulletin of Information may be obtained without charge from the College Entrance Examination Board. The Bulletin contains rules regarding applications, fees and reports; rules for the conduct of the tests; advice to candidates; descriptions of the tests; sample questions; and lists of examination centers.

Candidates should make application by mail to the College Entrance Examination Board. Students who wish to take the examinations in any one of the following western states, territories, and Pacific areas: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Territory of Alaska, Territory of Hawaii, Australia, and all Pacific islands except Formosa and Japan, should address their inquiries and send their applications to College Entrance Examination Board, P. O. Box 9896, Los Feliz Station, Los Angeles 54, California.

All others should write to College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey.

Application forms for the Scholastic Aptitude Test will be sent to any teacher or candidate upon request. When ordering the forms, candidates should state whether they wish forms for the December, January, March, May or August tests. Applications for any particular series will not be available until after the preceding series has been held. A copy of the Bulletin of Information is sent to every candidate requesting an application blank.

Each application to the College Entrance Board should be accompanied by the examination fee of \$6.00.

Candidates are urged to send in their applications and fees to the College Entrance Board at least several weeks before the closing date, since early registration allows time to clear up possible irregularities which might otherwise delay the issue of reports. Under no circumstances will an application be accepted if it is received at the Board office later than one week prior to the date of the examination. No candidate will be permitted to register with the supervisor of an examination center at any time. Only properly registered candidates, holding tickets of admission to the centers to which they present themselves, will be admitted to the tests. Requests for transfer of examination center cannot be considered unless these reach the Board office one week prior to the date of the examination or earlier.

The Board will report the results of the tests to the institutions designated on the candidates' applications. The colleges will, in turn, notify the candidates of the action taken upon their applications for admission. Candidates will not receive reports upon their tests from the Board.

Expenses

TOTAL PAYMENTS by students cover only approximately 75% of the cost of operating the college. Admission to Pomona in itself, therefore, confers upon each student, in addition to any special awards he may win, an annual scholarship of approximately \$300. This sum is provided by income from endowment funds and by gifts from those interested in furthering the high purpose of the college.

The rising costs of education have greatly increased the average amount spent on each student. The College reserves the right to change any of the following fees at any time should conditions make it necessary.

General Fees

TUITION, including health service, season tickets for Artist Course and Athletic Events	per semester	\$300.00
ASSOCIATED STUDENT DUES	per semester	7.50
GRADUATION FEE		10.00

Residence Fees

ROOM AND BOARD	per semester	315.50
(For men living in Smiley Hall, the charge is \$275.50 per semester. In Clark Hall a few rooms with fireplace are available for men, for which the charge is \$343.00 per semester.)		
ROOM DEPOSIT, applicable on payment of bills for final semester of residence. (See pages 35, 40.)		50.00
RESIDENTIAL BREAKAGE DEPOSIT, held until a student withdraws from college. (See page 40.)		10.00

Departmental Fees

For exact fees in science and music see Courses of Instruction.

LABORATORY FEES	\$ 2.00 to 10.00
LABORATORY BREAKAGE DEPOSITS	4.00 to 10.00
FEES FOR APPLIED MUSIC	25.00 to 60.00
PRACTICE FEES, APPLIED MUSIC	2.50 to 15.00

Fees for Special Privileges

LATE REGISTRATION See page 70)	\$2.00 to 10.00
CHANGE OF PROGRAM (See page 70)	3.00
SPECIAL EXAMINATIONS	2.00

Fees for Part-time Students

SPECIAL TUITION FOR STUDENTS CARRYING LESS THAN TEN UNITS OF WORK	per unit \$30.00
AUDITOR'S FEE	per course \$10.00

RESIDENCE FOR MEN

The College is equipped with dormitory and dining hall facilities to accommodate most men students and it is expected that men not actually living at home will live and dine in college halls.

Residential campus privileges are provided only on the basis of an inclusive charge varying according to location of room. The standard charge in Clark Hall is \$315.50 per semester, but a few rooms with fireplace are available at \$343.00. The price for rooms in Smiley Hall is \$275.50 per semester. These charges include necessary furniture, rugs, bed linen and towels, the laundering of the same and the care of rooms. The only articles to be furnished by the student are blankets and bed spread.

RESIDENCE FOR WOMEN

Women students are expected to room in residence halls and board at college dining rooms. Freshmen are required to reside in Harwood Court. Students living at home or working for room or board may make special arrangements with the Dean of Women.

Harwood Court and the two College Houses have both single and double rooms, as well as suites. Except for a few double rooms, single accommodations are provided in Blaisdell Hall and Budd Hall. Each room is adequately furnished; the only articles to be provided by the student are linen, blankets, and spread for a single bed. Residential campus privileges are provided on the basis of an inclusive charge of \$315.50 per semester.

RESIDENCE REGULATIONS

The residence privilege does not include the use of rooms during vacation periods. The residence halls are open for new students

the Friday before the opening of the college year and for returning students the day of registration. The residence and boarding privileges end 24 hours after the last examination at the end of each semester for all students except seniors and those asked by the college to remain through Commencement. The residence and dining halls are closed the day after Commencement.

Each student is required to make a deposit of \$50 for a room in the dormitory. This deposit is held by the college until the student's final semester in residence, when it is applied on his college bills for that semester. The deposit will be refunded if notice of withdrawal is given not less than sixty days before the opening of the term for which the student is withdrawing.

A residential breakage fee of \$10 is required from each student from which deductions are made for individual and communal damage to college property, any balance being credited to the student's account on graduation or withdrawal.

The College reserves the right to dismiss from a residence hall without rebate of room rent any student who becomes an undesirable occupant.

The College may dispose of any articles left by students for more than six months.

BILLS

All college bills are due each semester in advance and must be paid by the student at the time of registration. Students wishing to arrange for payment by installments should confer with the Bursar before entering, preferably in the summer preceding registration.

A service charge for deferment will be made as follows:

First semester

Balance payable on or before November 1	\$1.50
Balance payable one-half November 1 and one-half December 1	2.25
Balance payable one-third November 1, one-third December 1, and one-third January 1	3.00

Second semester

Balance payable on or before March 1	1.50
Balance payable one-half March 1, one-half April 1	2.25
Balance payable one-third March 1, one-third April 1, and one-third May 1	3.00

It is expected that payment of installments will be made on or before due dates; failure to do so without the approval of the bursar will result in an additional service charge.

No refunds are made to those leaving before the end of the term except that in the case of those leaving before the middle of the term because of illness one-half of the tuition and laboratory fees are refunded and in the case of those dropping out for good cause within a week of their registration all but \$25.00 is returned. No refund is made on a room payment unless the room is re-rented to someone not then rooming in a college residence hall.

Students with unpaid bills are not given honorable dismissal or graduated. Seniors must settle all college bills and library obligations by four p.m. of the fourth day preceding Commencement if they are to receive their diplomas with their class.

Scholarships and Student Aid

THE COLLEGE offers an extensive scholarship and student aid program, and approximately \$70,000 will be available to Pomona students for scholarships, fellowships, grants-in-aid, and prizes during 1950-51. These funds are derived from endowments for scholarships and student aid, from individual donations, from the annual Alumni Fund, and from the general college budget.

Scholarships are awarded to students who achieve outstanding academic records and who need financial assistance to attend college. In making awards the Committee on Scholarships considers the candidate's promise in literary, scientific, or other scholastic ability, qualities of manhood or womanhood, force of character, power to lead and to take an interest in the college community, and physical vigor as shown by interest in outdoor sports or in other ways.

Entering students must file scholarship applications, together with the application for admission (\$5.00), by March 1, 1951. Applications should be made on regular scholarship blanks. It is ordinarily understood that candidates for Freshman scholarships will not have attended any other college or university. Candidates need not apply for specific annual freshman scholarships as each student is considered for any award for which he is eligible.

FOUR-YEAR SCHOLARSHIPS

Alumni Four-Year Scholarships: Five scholarships of \$3000 each are available from the Alumni Scholarship Fund for payment of college bills. \$750 is payable the first year and \$750 a year for the following three years. The stipend for each year is payable half each semester, but the scholarship may be withdrawn at the end of any semester if the student's conduct or scholarship record is unsatisfactory. A scholarship average of B or better is normally expected.

A candidate for an Alumni Scholarship must be nominated by the Principal or Headmaster of the secondary school from which he comes and must be recommended by those officials as a person of outstanding ability who gives promise of being a leader among his fellows and a good student. Candidates for Alumni Scholarships must give evidence that financial aid is necessary, and payments beyond the first year will be made only if the need continues. All candidates must meet the regular admission requirements and take the required examinations.

SCHOLARSHIPS FOR FRESHMEN

The following scholarships are available on a competitive basis to candidates for admission to the Freshman Class in the year 1951-52. Half of the stipend is available in the first semester and half in the second semester of the freshman year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better.

The Henry E. Storrs and Julia A. Storrs Scholarships: Two scholarships of \$600 each, open to men.

The Margaret Burton Harwood Scholarships: Two scholarships of \$600 each, open to women. Two scholarships of \$600 each, open to both men and women.

The Thomas J. Dowling Scholarship: One award of \$600, open to a man or woman.

The Henry G. Brainerd and Fannie Howard Brainerd Memorial Scholarship: An award of \$300, open to a man or woman.

College Scholarships: Thirteen scholarships of \$600 each, open to both men and women.

California Scholarship Federation Award: A scholarship of \$600 given by Pomona College to a man or woman nominated by the California Scholarship Federation.

JUNIOR COLLEGE SCHOLARSHIPS

The following scholarships are available for candidates from junior college, for the year 1951-52, half of the stipend being available in the first semester and half in the second semester of the year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better.

Junior College Scholarships: Three awards of \$600 each, open to both men and women.

Alpha Gamma Sigma Scholarship: One award of \$600 given by Pomona College to a candidate who is recommended by Alpha Gamma Sigma.

SCHOLARSHIPS FOR MATRICULATED STUDENTS

The scholarships listed below are available during 1950-51 for students who attended the college during 1949-50, and who have satisfied the matriculation requirements. They are not available to

entering students. Half of the stipend is available in the first semester and half in the second semester of the year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better. The degree of financial need is taken into account in the awarding of all scholarships. Applications for these scholarships should reach the committee by May 15.

The Frank G. Butler Scholarships: Four scholarships of \$700 each awarded to sophomores, juniors, or seniors who have achieved scholastic distinction.

The Olivia Phelps Stokes Scholarships: Three scholarships of \$600 each.

The Alumni Fund Scholarships: Seven awards of \$600 each.

College Scholarships: Twenty-one scholarships of \$600 each.

SPECIAL SCHOLARSHIPS

The Kappa Delta Honor Scholarship: An annual scholarship of \$450 established in 1926 by alumni members of Kappa Delta Fraternity and administered under a special committee, is awarded at the beginning of his senior year to an outstanding all-around man, who shows qualities of character, intellect, leadership, sportsmanship, and proficiency in athletic pursuits. The recipient must have been in residence during all three lower years, and must rank in the highest third of all the men in his class.

The Phi Beta Kappa Scholarship: A scholarship of \$150 endowed by the Pomona Chapter of Phi Beta Kappa is awarded at the beginning of the second semester to a senior who has been in residence for three years at Pomona and who is selected for the high quality of his scholarship and his promise of future distinction. The award is open to both men and women.

The Nu Alpha Phi Memorial Scholarship: A scholarship of \$400 endowed by the members of Nu Alpha Phi Fraternity and awarded to a man at the beginning of his junior year. Selection is made by a special committee on the basis of outstanding character and real financial need, the latter partially determined by records of student employment during the school year. Given in memory of the Fraternity's losses in World War II.

The Flora Sanborn Pitzer Memorial Scholarship: A scholarship of \$500 from The Sanborn-Pitzer Foundation, established by Russell K. Pitzer of the class of 1900 in memory of his wife, is available to a woman student in the sophomore, junior, or senior class who has shown scholarship ability and who requires financial assistance to remain in college.

The Malcolm Eversole Memorial Fund: A scholarship providing full tuition for a man in the Junior Class to be nominated to the Scholarship

Committee by the President of the College at the end of the nominee's second year in Pomona College. The selection is based not on scholastic rank only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character.

The Llewellyn Bixby Memorial Scholarship: A scholarship of \$500 available annually to a man or woman who has completed the freshman year in Pomona College and who shows proficiency and genuine interest in science. Given by Mrs. Llewellyn Bixby, '01, in memory of her husband.

Andrew Acker Sugg Memorial Scholarship: A scholarship of \$300 available annually to a junior or senior man who shows promise of outstanding work in the field of science. This fund has been established by Mrs. Andrew Acker Sugg in memory of her husband.

The A. L. Hobson Memorial Scholarship: A scholarship of \$500 open to a man student from Ventura County, California, who needs financial assistance to attend college. The recipient may be a member of any class at Pomona.

The Donald Houghton Bacon Scholarship: The parents of Donald H. Bacon, who died at the college in 1948, have established in his memory a \$5000 scholarship fund for men, the income of which provides an annual award to a deserving student who prepared for college at the Tucson, Arizona, High School, and who is recommended by the Superintendent of Schools in Tucson. If in any year no graduate of the Tucson High School is recommended for the award, it may be made to a senior student at Pomona College, who upon recommendation of the faculty is considered the outstanding member of his class with respect to excellence in class work, athletic ability, and general participation in campus activities.

Bertha Lebus Scholarship: A scholarship of \$300 endowed by Miss Bertha Lebus is available annually to a matriculated student attending the college. The recipient must be a person who shows a high degree of promise and who needs financial assistance.

The John P. Evans Scholarship: A scholarship of \$500 available at Pomona College will be awarded annually to a man who has completed two years at Mount San Antonio College. One half of this sum shall be available for college bills in the junior year; the remainder for the senior year. Candidates for this scholarship, who will be nominated by the Director of Mount San Antonio College, must be of outstanding ability and give promise of becoming good students and leaders among their fellows. The candidate selected must meet regular admission requirements and conditions of competition prevailing at Pomona College.

The Associated Men Students Scholarships: The Associated Men Students of Pomona College annually offer the two following awards: (1) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and proficiency in athletics. To be considered for the award a man must have maintained at least a B

average in all his college work, and must have been in residence at Pomona for at least one year. (2) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and attainment in extracurricular activities. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year.

The Associated Women Students Scholarship: A scholarship of \$600 will be awarded for the year 1950-51 to a Pomona woman on the basis of leadership, scholarship and financial need. The award will be administered by a special committee working in conjunction with the College Committee on Scholarships.

The Jessie Gibson Scholarship Fund: An Associated Women Students Fund for scholarship awards to members of minority groups who exhibit high qualities of character, leadership and scholarship. The awards will be administered by the A.W.S.

DEPARTMENTAL SCHOLARSHIPS

ART

The Hannah Tempest Scholarships: Two scholarships of \$100 each are awarded annually to a man and a woman studying art, in accordance with conditions laid down by the donor, Mrs. Hannah Tempest Jenkins.

ASTRONOMY

The Shatto Memorial Scholarship: A scholarship of \$200 is provided annually from the income of the Walter O. Shatto and Clara R. Shatto Memorial Funds for a qualified upperclassman or graduate student majoring in the Department of Astronomy, the candidate to be selected on the joint recommendation of the department and the Scholarship Committee.

CHEMISTRY

Chemistry Contest Scholarship: A scholarship of \$600 is offered by Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Chemical Society. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

GEOLOGY

The Richard E. Strehle Memorial Scholarship: A scholarship of \$250 from the income of the Richard E. Strehle fund is awarded annually to a junior man with the physical, mental, and moral qualities desirable in a field geologist. Choice is made near the end of the sophomore year, on nomination by the Geology Department to the Scholarship Committee. The award may be withheld in any year, and additional awards may be made in years when extra income is available.

MILITARY

The advanced course of the Reserve Officers' Training Corps consists of

Military Science III and IV. Students who have completed the basic course (Military Science I and II) or who are accorded equivalent credit because of military or naval service are eligible for enrollment in the advanced course. Students enrolling in the advanced course enter into an agreement to complete the two year course and attend one summer training camp of six weeks. In consideration of this agreement, students receive from the United States Government cash allowances equivalent to scholarship of about \$310.00 a year. All necessary expenses in connection with camp, including transportation to and from the camp, food, housing, uniforms and medical attention are provided by the government.

Advanced course ROTC students whose attainments in military science are outstanding may be designated by the Professor of Military Science and Tactics as "Distinguished Military Students." A number of distinguished military graduates of Senior ROTC Units may be selected for direct Regular Army appointments.

The number of students admitted to the advanced course is limited by available appropriation and to that number recommended by the college authorities as being well-qualified to pursue the course. The selection of students for enrollment in the advanced course is based upon excellence in military training and suitability for appointment as second lieutenants in the infantry branch of the U. S. Army Officers' Reserve Corps. Students who present evidence of above average records while in military or naval service, or who have distinguished themselves in the basic ROTC course of this or other schools will receive special consideration in the selection of those students to be enrolled in the advanced course.

MUSIC

The Kate Condit Memorial Scholarship: A scholarship of \$80, endowed by the late Mr. and Mrs. A. P. Condit, is awarded annually to an outstanding student in the Department of Music.

The William J. Howard Memorial Scholarship Fund: Established by alumni and friends in memory of William J. Howard, '14. A scholarship of \$90 is awarded annually to a student for lessons in applied music.

The Presser Foundation Scholarships: A fund of \$250 is given to the college annually by the Presser Foundation of Philadelphia, for the assistance of music students. Scholarships from this fund are awarded by the Music Department.

PHYSICS

The Richard P. Edmunds Memorial Fund provides a scholarship of full tuition for an upper division man student (preferably one who has attended Pomona during the first two years) nominated to the Scholarship Committee by the Professor of Physics.

The Physics Contest Scholarship: A scholarship of \$600 is offered by Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Association of Physics

Teachers. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

FELLOWSHIPS

The following awards may be made for 1951-52 to graduating seniors if qualified applicants appear. Applications should be in the hands of the Committee on Scholarships by January 15, 1951. Should the student selected waive the emolument, the stipend must be paid to the candidate next in rank, while the first student would be designated Honorary Fellow for the year.

The Henry Martyn Bracken Foundation and the *Emily Robinson Bracken Foundation* provide two or more fellowships for graduate work in the Claremont Graduate School. When in any year a graduating senior does not qualify for the award, the stipend may be given to an undergraduate student in Pomona College.

The C. E. and Bertha M. Harsh Memorial Scholarship Fund provides income for scholarship aid to Pomona College graduates attending the Claremont Graduate School. Although the Board of Fellows is empowered to make grants of the income for the assistance of any capable and promising graduates of Pomona College attending the Claremont Graduate School, it is the preference of the donors that first consideration should be given to those who are doing advanced work in the Fine Arts.

The William Lincoln Honnold Foundation provides a fellowship with stipend determined by the committee of award according to individual circumstances. The award is open normally only to graduating Seniors who have done four full years of work in Pomona College, who are rated in the upper half of the graduating class on the basis of their performance during both the junior and senior years, and who wish to continue their studies either at the Claremont Graduate School or elsewhere in America or abroad.

The prime purpose of the fellowship is to promote original and creative achievement in the candidate's chosen field of activity rather than merely to reward faithful classroom work. The selection will be based not on scholarship only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character. The plans for graduate work are to be made in consultation between the candidate and the Committee on Scholarships, the committee having final authority. At the end of the year, the Honnold Fellow is to make a full report to the Committee on Scholarships covering the character of his work, impressions of the institution in which he has been residing, his plans for the immediate future, and recommendations for the further development or improvement of the fellowship plan.



The patio is a delight to the women of Harwood Court.

The Carnegie Library is rich in special collections as well as in general resources.





Bridges Auditorium provides opportunity for students to hear the world's foremost artists.

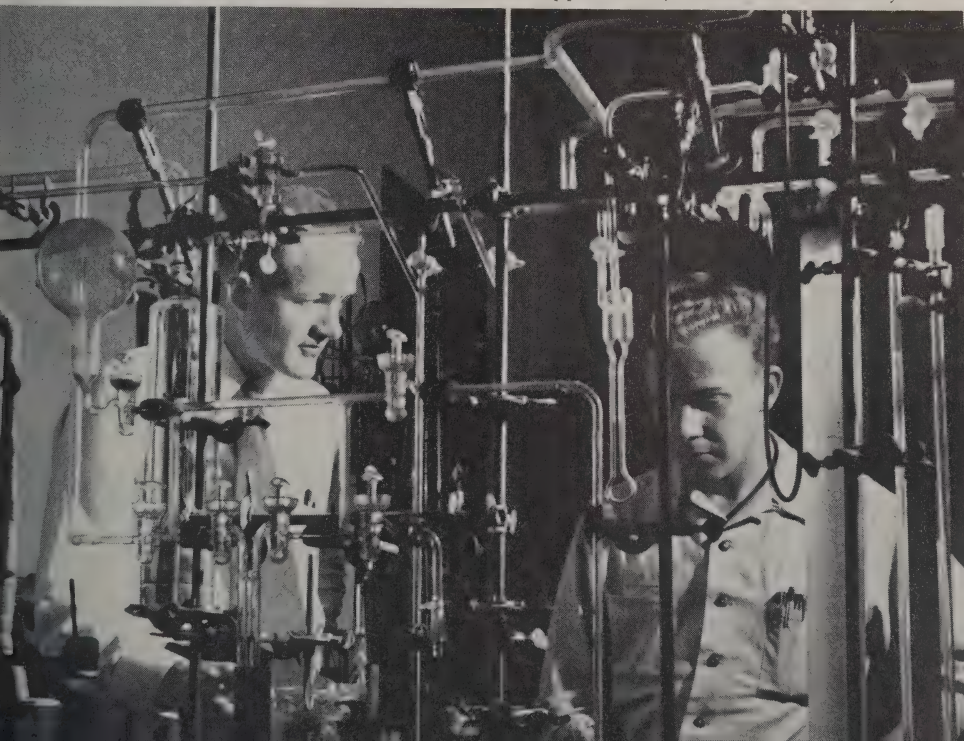
The Student Union is the center of the students' extra-curricular life.





Modern calculators and adding machines are available to students of economics.

A chemistry student is introduced to the intricate apparatus of a modern laboratory.





Tea-time in Mudd Hall, beautiful new residence hall for women.

Pomona has maintained since 1919 a voluntary unit of the ROTC.



The Committee on Scholarships also nominates students of Pomona College who wish to apply for awards by other institutions and foundations. Those who seek nomination to the Rhodes Scholarships should advise with the Committee on Scholarships.

CLAREMONT GRADUATE SCHOOL SCHOLARSHIPS

In addition to the awards for graduating seniors offered through Pomona College, scholarships for graduate work are available at the Claremont Graduate School.

Three Honnold Scholarships, two of \$750 each, and one of \$500, are awarded in the field of Oriental Affairs. General scholarships of \$600 each are available for work in the field of the candidate's choice. A few graduate assistantships with a stipend of \$600 and half tuition in the Claremont Graduate School are available through Pomona College and Scripps College.

STUDENT AID

In addition to the scholarship awards, the college makes grants-in-aid available to students doing satisfactory academic work who require financial assistance to continue at Pomona. To this end the income of certain endowed funds is supplemented by a budget appropriation. Such aid is normally given only to students who have completed one year in Pomona College, who are or intend to become candidates for a degree from Pomona College, who maintain a high standard of honor, who are economical in their habits, who are regular in their attendance upon college exercises, and who maintain at least C grade in their scholastic work. Recipients of grants-in-aid are expected to earn part of their college expenses by employment during vacations and term time.

Aid may be withdrawn at any time from students who prove not to have conformed to the conditions.

If a student who has received a grant-in-aid transfers to another institution before graduation the total sum granted him by Pomona College may become a loan, repayable according to the terms applicable to regular student loans. It is customary to extend loans only instead of grants to students who are in the second semester of the senior year.

All applications for aid should be made to the chairman of the Committee on Scholarships and Student Aid, Sumner Hall, before

May 1 for the first semester of the following academic year, and before January 15 for the second semester of the current academic year.

STUDENT AID FUNDS

The income from the following funds is available for student aid.

The Francis Bancroft Memorial Fund of \$1500, given by Mrs. James Ford in memory of her father.

The L. H. Barrows Fund of \$2500.

The H. G. Billings Memorial Fund of \$1000.

The Florence G. Bixby Fund of \$5000.

The Hagop Bogigian Fund of \$31,402.

The Sherlock Bristol Memorial Fund of \$400.

The Bessie A. Brown Memorial Fund of \$800, given by Mrs. Fannie Brown.

The Henry Herbert Brown Memorial Fund of \$1000 given by Mrs. Fannie E. Brown in memory of her son.

The Class of 1918 Fund, \$961.

The Charles C. Cragin Memorial Fund of \$5025, given by Mrs. Laura Cragin in memory of her husband, Rev. Charles C. Cragin.

The Agnes K. Crawford Memorial Fund of \$1000, given by David Crawford and William Crawford in memory of their mother.

Ebell Club of Pomona Student Aid Fund of \$1000. To help a woman student.

The Elwood Fund of \$2600, given by Mary E. Elwood.

The Ford Fund of \$2500, given by Rev. James T. Ford.

The Margaret Fowler Fund of \$1000.

The Orren A. Gorton Fund of \$5000.

The Emma K. Guild Fund of \$44,337.

The Manette Hand Memorial Fund of \$1500.

The Alfred James Harwood Memorial Fund of \$8000.

The Charles E. Harwood Fund of \$5000.

The Thomas F. Howard Memorial Fund of \$3500, given by Dr. and Mrs. H. G. Brainerd in memory of Mrs. Brainerd's father.

The Mary Marvin Janes Fund of \$679.

The Helen Day Jewell Fund of \$1000.

The Henry L. Kuns Fund of \$2000.

The Jean Loomis Fund of \$2000.

The Howard J. Mills Memorial Fund of \$3000.

The Ontario Congregational Church Fund of \$186, given by the Ontario Congregational Church toward the endowment of a fund.

The Page Fund of \$5000, given by Mrs. Loraine H. Page. (Three thousand dollars of this may at some time be used for other purposes.)

The Arthur Warren Phelps Memorial Fund of \$2000, given by Mrs. C. S. Phelps and Mr. C. A. Phelps in memory of their son and brother.

The Lydia Phelps Memorial Fund of \$4000.

The Pilgrim Church of Pomona Fund, \$2002, given by the Pilgrim Congregational Church of Pomona.

The Pilgrim Church Women's Auxiliary Fund of \$556, given by the Women's Auxiliary of the Pilgrim Congregational Church of Pomona.

The John D. Potter Memorial Fund of \$2000, given by Mrs. S. T. Potter in memory of her husband.

The Anna H. Searing Fund of \$1800.

The Clyde H. Shields Memorial Fund of \$2000, given by R. P. Shields in memory of his oldest son.

The Lucia Glidden Strong Fund of \$911.

The Sweet Memorial Fund of \$2500, given by Harlan P. Sweet in memory of his wife.

The Maria T. Wardwell Fund of \$1000.

The Clara B. Waterman Memorial Fund of \$5000, given by Miss Rosa May Bennett.

The Henry S. West Fund of \$2000.

SPECIAL FUNDS

The Crombie Allen Scholarship Fund of \$1000, half of the income available annually to a graduate of Chaffey Union High School and half to a graduate of Chaffey College of Ontario, California.

The Martha E. Berry Memorial Fund of \$6000, for foreign students.

The Mabel S. Bridges Memorial Fund of \$3500, available for women.

The Alice Paul Harwood Scholarship Fund of \$5000, open to graduates of Chaffey Union High School of Ontario.

The Stella M. King Scholarship and Loan Fund for Women, \$10,000.

The Francis M. Price Fund of \$1000, for children of missionaries.

LOAN FUNDS

The college also administers loan funds by which it is possible to cooperate with the urgent need of students in making available to them amounts sufficient to cover tuition fees. Interest at the rate of 4% per annum begins on graduation or at the time of leaving the college. Loans from the following funds may be available on applications for which should be addressed to the Committee on Scholarships and Student Aid.

The Ray Loan Fund of \$1753, given by Mrs. E. F. Ray, to provide a means of meeting situations of temporary need.

The Lucy B. Jencks Memorial Fund of \$410, established by the Claremont Chapter of the D.A.R., available for a senior girl designated by the Dean of Women.

The Ethan Allen Chase and Augusta Field Chase Fund of \$6651, available for men.

The David Clark Fund of \$1144.

The Robert C. Denison Memorial Fund of \$581.

The George E. and Maude C. Baxter Fund of \$305.

Students of Pomona College Revolving Fund of \$2500.

The Edwin C. Norton Memorial Loan Fund of \$1447, available for undergraduate students, or for graduates of the college who wish to pursue advanced work in other institutions.

The C. F. Baker Memorial Loan Fund of \$195, available for undergraduate students, preferably juniors or seniors, in the departments of Botany and Zoology, who are approved by the heads of those departments.

General Loan Fund of \$72,374.

The Caroline Phelps Stokes Fund of \$25,000, endowed by the will of Olivia Eggleston Phelps Stokes in memory of her sister, income from which is available for loans.

The A. G. McKenna Loan Fund of \$2940, available to graduating seniors for advanced work at the institution of the student's choice.

STUDENT EMPLOYMENT

The College endeavors to find employment for students needing to earn part of their expenses. Many are thus helping themselves.

by various forms of labor such as baby sitting, janitor work, waiting on tables, general house work and gardening.

Applications for aid in securing employment should be addressed to the Director of Placement Service, Sumner Hall.

PRIZES AND AWARDS

GENERAL

The following prizes and awards are available for general accomplishments and for proficiency in the work of the several departments:

The Rena Gurley Archibald High Scholarship Prize: A prize of \$40 to be awarded to that member of the graduating class taking the B.A. course and ranking highest in scholarship was established by the bequest of the late everend Andrew W. Archibald, D.D.

The Arvid Pierre Zetterberg Award: From a fund endowed by Mr. and Mrs. A. P. Zetterberg in memory of their son, Lt. Arvid Pierre Zetterberg, an annual award of \$50 is made to the sophomore man who during his freshman year exemplifies the highest qualities of character, scholarship, and interest in many sports. The award is made on nomination of the Scholarship Committee and is presented at the Opening Convocation in September.

Essay Contest on History of Pomona College: Prizes of \$25, \$15 and \$10 are offered by the Alumni Association for the three best essays, submitted by freshmen, on some phase of the early history of Pomona College. Exact topics from which to choose and rules of the contest are announced about October. Announcement of winners is made at the Matriculation Convocation.

ART

The Rembrandt Club Art Prizes: A first prize of \$25, and a second prize of \$10, are awarded by the Rembrandt Club for excellence in drawing and design, in work presented for the annual student exhibition.

The Rembrandt Club Art History Prize: A prize of \$10 is given by the Rembrandt Club for the best paper presented in the course in History of Art.

ASTRONOMY

The Moncrieff Astronomy Prize: A prize given to the student in the first year course in Astronomy, taken regularly in class, whose interest in the study and proficiency in the observatory work are indicated by the best notebook kept in accordance with the teacher's suggestion. A prize of \$20 is given by Miss Flossie C. Moncrieff, '11.

BIOLOGY

The Vaile Prize: A prize of \$15 to be awarded to an outstanding student in Botany or Zoology was endowed by the late Mr. Charles S. Vaile.

CHEMISTRY-GEOLOGY

The James A. Lyman Prize: A prize of \$100 awarded at the beginning of the college year to a senior student majoring in chemistry or geology, who in the opinion of the chemistry-geology faculty, shows special promise of achievement in research or teaching, or both. Established in memory of James A. Lyman, Professor of Chemistry 1909-1926, by his son, Dr. Geo. P. Lyman, '26.

EDUCATION

The Ada May Fitts Education Prize: A prize of \$50 endowed by Mr. Charles T. Fitts in memory of his wife, Ada May Fitts, is awarded annually to a student for excellence in courses in the Department of Education and for unusual promise in the educational field.

ENGLISH

The John Dye Award: From a fund established by Mr. and Mrs. John Thomas Dye in memory of their son, John Thomas Dye, III, who was Lieutenant in the Army Air Corps, is offered an annual award of \$100 to the best piece of original writing to appear in a student publication. The award is announced at Commencement time.

The F. S. Jennings Memorial Prizes: Three prizes for men and three prizes for women of \$50, \$40, and \$30, respectively, for excellence in English are available each semester to members of the Freshman class taking English. In the award of these prizes attention is given to the interest shown by a student in improving the quality of his written and spoken English.

GOVERNMENT

The Edward M. Sait Prize: A prize of \$5 for the purchase of a book relating to American or comparative government, or for a membership in the American Political Science Association, is awarded to the student doing the best work in the basic course in government.

The Russell M. Story Prize: A prize of \$5 for the purchase of an appropriate book, or for a student membership in the American Society for Public Administration, is awarded to the student doing the best work in the course in public administration or in state and local government.

The George S. Burgess Prize: A prize of \$5 for the purchase of an appropriate book, or for a subscription to a selected law review is awarded to the student doing the best work in the course in legal history or constitutional law.

INTERNATIONAL RELATIONS

The Cordell Hull Prize: An award of \$50 is offered annually to a student who submits to the committee on International Relations the best essay on a problem relating to the United Nations. Subjects must be cleared with the secretary of the committee on or before April 1, and the essay between 2500 and 3000 words in length, must be submitted in triplicate on or before May 1. In case no one essay is of outstanding merit, the committee reserves the right either to divide the honors or to make no award.

LATIN

The Mudge Latin Prizes: First and second prizes of \$10 and \$5, respectively, for excellence in Latin are endowed by friends of the College.

LIBRARY

The Eda May Haskell Library Prize: A prize of at least \$15 in the form of a purchase order for books is offered for the best library submitted by a senior student, not necessarily for the largest or most expensive collection but for the most intelligently selected books in one or more fields of the student's interest.

MATHEMATICS

The Llewellyn Bixby Mathematics Prize: A prize of \$10 for excellence in Analytic Geometry and Calculus; open to all students completing both Mathematics I and 65.

MUSIC

The Barbara Sanford Allen Prize: An annual competitive prize of \$50 to be awarded to a student in the department of music, above freshman rank. This award is made possible by the husband and parents of a graduate of the Class of 1915 of Pomona College.

PUBLIC SPEAKING

The Kinney Declamation Prizes: A prize declamation contest open to members of the Freshman class occurs early in the second semester. First, second, and third prizes of \$25, \$20, and \$15, respectively, are endowed by Mrs. H. N. Kinney.

The Dole Debate Prizes: A prize debate for lower-division men is held near the close of the second semester. First and second prizes of \$30 and \$20, respectively, established by the late Mr. John H. Dole in memory of his brother, Mr. William B. Dole, are endowed by Mr. Arthur M. Dole, '96.

The Stella King Prizes: The opportunity to compete for prizes totaling \$75 for speeches of their own composition is offered to upper-division students. The judges have the right to distribute the prize money among the contestants as they see fit, or to withhold all awards if they feel warranted in so doing. These prizes were endowed by the late S. H. Wheeler, in memory of Miss Stella King.

RELIGION

The Hager Prize: A prize of \$10 for the best essay on a foreign missionary subject, open to all students, was endowed by the late Mr. and Mrs. C. R. Hager.

General Information

LIBRARY

AT PRESENT the library contains 121,500 volumes and 161,1 government documents. It receives subscriptions to 7 periodicals and maintains bound files of approximately 5 many of which are complete. Especially valuable are the periodic holdings in the field of natural science. The library is a depository for U. S. Government Documents and the publications of the Carnegie Institution.

The following special collections are a part of the general library: the Cook-Baker Biological Library and the Parish Botany Library in Crookshank Hall; the James A. Lyman Memorial Library in Chemistry and the Geology Library in Mason Hall; and the Mathematics and Physics Library in Pearsons Hall. Housed in the main building are the Mason California, the Wagner North Pacific Libraries, and the Viola Minor Westergaard and Carnegie A Collections.

A staff member is on duty to assist students at all hours while the library is open. Most of the books are on open shelves where students may consult them at all times. With the exception of reference books, periodicals, and rare volumes, books may be borrowed for two weeks. Certain books in great demand for class use are placed on reserve, subject to special circulation rules.

The library is open to the students and faculty of the Associated Colleges and to the residents of Claremont.

In addition to the Pomona College Library there are also available the libraries of Scripps College, the Claremont Graduate School, and Claremont Men's College. The Scripps College Library of approximately 40,000 volumes is housed in the Ella Stron Denison Library. It contains in addition to its general collection the Macpherson Collection of books about women, and the Stephenson Memorial Collection of American History. The library of the Claremont Graduate School, located in Harper Hall, contains approximately 55,000 volumes, including the Oriental Library, the Library of the Americas, and the George Burton Adams Collection of English History.

LECTURE FOUNDATIONS

The Joseph H. Johnson Foundation, liberally endowed by Miss Ellen B. Scripps, provides an annual income for the purpose of furnishing to the College for a protracted stay and intimate participation in college life notable educators from other institutions. By this means such educators are annually in residence in Pomona College.

The Henry D. Porter Foundation, named in honor of the late Rev. Henry D. Porter, for many years a missionary in China, secures to the institution annually the extended stay of some prominent worker in the field of Christian Missions. The lecturer upon this foundation commonly shares in the regular classroom work related to the history, geography, politics or religion of the region from which he has come.

The Clark Foundation, established by Mr. Arthur O. Clark, makes it possible for the College to offer each year a lecture or course of lectures in the general field of religion.

PUBLIC ASSEMBLIES

On Thursdays at 11 a.m. General Assembly is held for the purpose of hearing visiting lecturers or members of the faculty discuss topics of interest to the whole institution. This assembly period is also used for student body and class meetings.

On five stated occasions throughout the year, including the opening of each semester, College Convocation is held. Full attendance of both faculty and students is expected at these exercises.

RELIGIOUS ACTIVITIES

The four Associated Colleges of Claremont unite in a College Church which holds its services each Sunday morning at eleven o'clock in Bridges Hall of Music. The Church is the coordinating force for religious activities among the colleges. Students participate in the services and there is a special student choir for the Church. Dr. Merrimon Cuninggim, Professor of Religion at Pomona, serves as the Associated Colleges Chaplain. Once each month a guest minister occupies the pulpit.

The College Chapel, which is altogether a service of worship, is held every Tuesday morning from 11:00 to 11:25 in Bridges Hall

of Music. Both students and faculty participate in the program, which attendance is voluntary.

Various expressions of religious interest and forms of religious activity exist on the Pomona campus: worship, study and discussion groups, campus and community programs of service, and contacts with intercollegiate enterprises. These interests and the sponsoring organizations are united in the Pomona College Christian Association as a central, campus-wide agency to encourage interest in religion and to develop religious activities.

The Association maintains relationships with the national Student Christian Movement and the World Student Christian Federation. Through one of its committees it joins with the College in sponsoring the weekly Chapel service. Under its or the College auspices, or that of both, certain occasions of special religious emphasis are provided during the course of the academic year: seasonal celebrations, retreats and conferences, visitations to the campus by prominent religious leaders.

Opportunities for Sunday morning worship are also available at the Claremont churches which welcome the participation of students in their activities.

MUSIC

The College cooperates with Scripps College, Claremont Men's College, and the Claremont Graduate School in the presentation of the Bridges Auditorium of the most distinguished masters in the field of music. Regularly included in the series is the Los Angeles Philharmonic Orchestra, under the direction of Alfred Wallenstein.

For the concerts thus afforded an annual ticket is furnished to every full-time student without extra charge.

Under the auspices of the Pomona College Department of Music complimentary public recitals by individual students and members of the faculty and by groups are given frequently throughout the year. These are usually given on Monday evenings.

The College Symphony Orchestra, the Choir, the Band, the Men's and Women's Glee Clubs, and chamber music groups, afford opportunity for the study and public performance of the finest ensemble music.

CAMPUS ORGANIZATIONS

The Associated Students. This association coordinates all student activities. Its officers are chosen by the student body from among their own number. All important questions are first considered by the Executive Council, a governing group composed of class presidents and chairmen of other organizations representing various activities of campus interest. These students are responsible not to the organizations which they represent on the Executive Council but to the Executive Council itself.

Associated Men Students and Associated Women Students. These organizations consider and promote the special interests of the men and women respectively.

Class Organizations. Each of the four college classes is organized for the purpose of promoting class social life.

Phi Beta Kappa. The Pomona Chapter of Phi Beta Kappa is the Gamma of California. Upperclassmen "who are of good moral character, who are candidates for the degree of Bachelor of Arts, and who are distinguished for breadth of culture and excellence of scholarship" are eligible to membership in the Phi Beta Kappa Society.

Honor Societies. Ghosts; Mortar Board; Gamma Chapter of Alpha Kappa Delta, Sociology Fraternity; California Alpha Chapter of Kappa Mu Epsilon, National Honorary Mathematical Fraternity.

Departmental Organizations. Women's Recreational Association; El Circulo Español, Le Cercle Français, German Club.

Musical Organizations. Men's Glee Club; Women's Glee Club; Music Club, Symphony Orchestra, Chamber Music Groups, Band.

Religious Organizations. The College Church of the four Associated Colleges and the Pomona College Christian Association, which is composed of various committees for religious worship, study, and service.

Miscellaneous Organizations. Masquers and Thespians, in Dramatics; Orchesis, in Dancing; Camera Club; Ski Club.

Local Social Fraternities. Alpha Gamma Sigma; Kappa Delta; Kappa Theta Epsilon; Nu Alpha Phi; Phi Delta; Sigma Tau. Each fraternity has a club room in one of the residence halls on the men's campus. Approximately one-third of the men students belong to the fraternities which pledge new members during the sophomore year. There are no sororities on the campus.

PUBLICATIONS

The stated publications of the College are issued as numbers of the *Pomona College Bulletin*, which is published monthly except in July and August. These include: the *Annual Catalog*, the *Report of the President*, and the *News Letter* for Alumni.

The *Journal of Entomology and Zoology* is published under the auspices of the Department of Zoology.

STUDENT PUBLICATIONS

The *Student Life* is published twice a week by the student body and is devoted to campus affairs.

The *Metate* is the yearbook published by the Associated Students.

The *Sagehen*, a magazine of humor, appears three times a year.

The *Hand Book*, which contains material designed especially for new students, is issued at the beginning of the year by the Associated Students.

SUPERVISION OF CONDUCT

Pomona College expects that its students, having voluntarily enrolled in the college, will abide by the practices of the institution. This means that students are to show respect for personal honor and for the rights of others and that their conduct is to be governed by the standards of personal good taste and ethical judgment.

The use or possession of alcoholic liquors of any kind on the campus is prohibited by the college.

Conduct on or off campus which may bring discredit to the college or the individual will subject the student to disciplinary action.

Individual or collective student enterprises which use the college name and involve the absence of the participants from the college must receive the official sanction of the Committee on Student Affairs.

The College reserves the right to request the withdrawal, without publication of specific charges, of any student who proves himself an objectionable member of the student body.

The faculty has placed the interpretation and execution of these policies in the hands of the Committee on Student Affairs which consists of the deans and certain faculty members appointed by the President. Under this Committee as a policy-making body functions the College Life Council, composed of six faculty members appointed by the President and nine student members elected partly by the student body and partly by the Executive Council of the Associated Students.

At the present time the College Life Council has been delegated the responsibility for the administration of discipline, for dealing with inter-class rivalry, for supervision of fraternities, and for dealing with infringements of academic honesty and honor. It is probable that additional responsibilities will be assigned to the College Life Council from time to time.

The Judiciary Committee of the Associated Women Students and the Judiciary Committee of the Associated Men Students administer regulations concerning conduct in the residence halls on their respective campuses, and, acting together as a joint body, carry out the policies of the College Life Council and act as a court in matters of discipline, except in those which are judged by the deans to involve serious problems of personality adjustment.

AUTOMOBILES

Rules governing the use of automobiles are formulated and administered by the Committee on Student Affairs. Students maintaining cars in Claremont are subject to the following regulations:

Ownership of the car, together with its license number, must be registered with the office of the Dean of Men at the opening of college or within three days after the car is driven in Claremont.

Student drivers must at all times, both on and off the campus, exercise particular care and consideration for the safety of themselves and others, and must acquaint themselves with the state and local traffic laws and comply with their observance.

Failure to comply with the above regulations shall constitute an offense against the college, the penalty for which may include sequestration and storage of the car at the student's risk and at his expense for a period not beyond the end of the term in which the offense occurs.

MEDICAL AND PHYSICAL CARE

Pomona College, in cooperation with Scripps, Claremont Men's College, and the Claremont Graduate School, engages the full-time services of a physician to care for its students. Dr. Gilbert Coltrin, who has held this position since 1940, is a graduate of Pomona College and the University of Rochester Medical School.

The medical advice of the College Physician is ordinarily available, free of charge, to all students, subject to certain conditions of hours and location of residence. Minor ailments are treated in the Physician's office or at the Infirmary, used for cases requiring nursing and certain types of hospital care. All surgical dressing and medicines are at the expense of the ill or injured as is all medical service in chronic or prolonged illness or in case of accident, or an acute illness beyond ordinary first-aid emergency treatment. The college nurse visits the residence halls each morning in order to see those students reported ill.

The student is entitled to two days each semester at the College Infirmary without charge for room and meals. If illness requiring hospitalization for additional days, the charge is five dollars per day. The College, however, reserves the right to discontinue the individual medical service at any time, without previous notice.

The College does not assume responsibility for the complete medical care of all its students, but only in so far as its present facilities will afford. Preventive medicine and campus health functions are stressed in the college medical program.

For curative treatment, students have ready access to the College Health Service and to the consultants among the leading physicians of Claremont and Pomona. However, complete service is not financed by the college.

When specialists, consultants and special nurses are required, such fees will be met by the student. In any illness the student is free to choose his own physician on a private fee basis.

Students are expected to conform to the medical regulations of the college.

PHYSICAL ATTENTION

The physical care of students is a matter of special concern to the college. Supervision is given to athletics throughout the college year. Every student on entering is given a physical examination under the direction of the College Physician. This examination is required of all incoming students. The medical certificate required of all applicants for admission includes a certificate of recent successful small-pox vaccination and a certificate of a satisfactory tuberculin test, or an x-ray of the chest, performed within the preceding six months. Any student, while in college, may be required to present each year a follow-up certificate of examination for tuberculosis. Regular work in physical education is prescribed throughout the four years, and courses in physiology, and hygiene are given.

Athletics. Pomona College and Claremont Men's College unite to conduct a joint program of intercollegiate athletics, under one coaching staff, as a member of the Southern California Intercollegiate Athletic Conference. Our teams, known as the "Sagehens," compete in football, basketball, track and field, baseball, cross country, swimming, golf and tennis.

The direction and financial management of athletics rest with the Director of Athletics, who has associated with him as an advisory body the Athletic Council, composed of three members of the Pomona Faculty, one member from the Claremont Men's College Faculty, three student members from Pomona and two student members from Claremont. Under the general manager, there is a student manager for each sport.

The colleges endeavor to safeguard students in the use of its physical education facilities, athletic fields, and gymnasiums, and to this end the department has established regulations concerning the use of such facilities, but it is clearly understood that students who use the same do so entirely at their own risk.

VOCATIONAL COUNSELING AND PLACEMENT

Through faculty advisers and the personnel services of the college, students receive assistance in their choice of a career. The college maintains a vocational counseling and placement service for the benefit of alumni and students. Many alumni cooperate with the

Director of the Placement Service, who is also Alumni Secretary of the college, in assisting seniors and graduates to find employment.

This service aims to provide reliable occupational information concerning representative business organizations, government agencies, the professions, and other opportunities for employment. The office of the Director of Placement Service is in Room 212, Sumner Hall.

Each year public conferences on modern careers for men and women are held on campus under the sponsorship of the faculty and student committees on vocational counseling and placement and also by individual departments. These round table discussions permit students to hear an organized presentation of twelve or more different vocational fields each year, and to ask questions during the sessions, as well as to meet the distinguished guest speakers at dinner. This series is opened by a special all-student assembly each year on ways of finding one's work in the world.

The Associated Students include in their budget support for the Vocational Information Center which is maintained in the Pomona College Library, with information on vocations in this country and opportunities for placement abroad and for foreign study. Information on scholarships and fellowships for graduate study is made available to interested students by the Dean of the Faculty and through the Vocational Information Center, as well as by department offices.

Students are given the opportunity to take vocational interest tests, and to consider the results with the Dean of Men or the Dean of Women or with other faculty advisers. Deans and advisers are available throughout the year to discuss with students their choice of academic fields of concentration as well as their vocational and personal goals.



Advanced students in musical composition receive individual instruction.

Crookshank Hall is the home of the botany and zoology departments.





Field trips to nearby mountains and desert are an important part of the geology course.

Playing fields and athletic courts are gathering places for men in the late afternoon.



The Curriculum

ALTHOUGH THE TRADITIONAL CONTENT of the liberal arts curriculum has been modified in recent years to meet the needs developed by social, scientific, and technological change, the modern program in liberal arts and sciences has in common with its predecessors a traditional function: to prepare students for a society which expects of them leadership in diverse roles and capacities, humble or great. Today, as in the past, the purpose of Pomona College is to help its students toward a life in which professional achievement is accompanied by personal happiness, cultural balance, and social responsibility. Its program, therefore, includes both courses intended for general education and courses designed for specialized study and preprofessional training.

The immediate objective of general education, as expressed in the course requirements of the College, is to help the student in his development of:

1. Ability to use the English language effectively, in reading, in writing, and in speech.
2. Acquaintance with scientific thought and method.
3. Acquaintance with the historical development of our civilization.
4. Acquaintance with and understanding of human society, its problems and its institutions.
5. Acquaintance with literature and the fine arts.
6. Appreciation of ethical and spiritual values.

With these purposes in mind, the College requires that certain courses be taken in the Freshman and Sophomore years.

To secure the benefits of intellectual discipline derived from concentrated study, and at the same time, in many instances, to prepare for professional training after graduation, every student upon entering the Sophomore year is required to select a field of concentration in which he will complete not less than twenty-four units of upper-division work during his Junior and Senior years.

The field of concentration may be represented by one department or may extend beyond departmental limits to include closely related subjects. For students of outstanding ability and well-defined interests, the field of concentration may be developed into a program of honors study. These requirements and programs of study are described in detail in the following pages.

SUMMARY OF REQUIREMENTS FOR THE DEGREE

Pomona College awards only the bachelor of arts degree. Commencement honors are awarded (1) on the basis of the over-all average of the student's work, and of the comprehensive examination, and (2) on the basis of the completion of a program of "Honors Study." These honors are further described on page 84.

Units: One hundred and twenty-six units (semester-hours) of work are required for graduation. A "unit" consists of one recitation or lecture period or one laboratory period a week for one semester. A recitation or lecture period covers fifty minutes; a laboratory period covers, in general, the time of three such periods. In order to complete the course in eight semesters one must take each semester an average of fifteen units of work exclusive of physical education activities.

Grade Points: In order to graduate, a student must not only earn a certain number of units, but also attain an average of at least C grade in all units for which he has registered, or twice as many grade points as units. A full explanation of the grading system will be found on page 68.

Residence: A minimum of four semesters in full-time attendance is normally required for graduation. All students are required to complete the final two semesters in residence unless individual exceptions are made by the Classification Committee.

Lower Division Requirements: All students must satisfy the requirements for distribution in the Lower Division as explained on page 71. These requirements should normally be met in the Freshman and Sophomore years, but their completion may be postponed to the Junior year. Postponement to the Senior year requires the permission of the Classification Committee.

Upper Division Requirements: In the Junior and Senior years all students must undertake a program of concentration leading to a comprehensive examination or its equivalent.

Physical Education Activities: Physical Education Activities must be included in the registration of each student every semester, in accordance

with the student's classification, until a maximum of six units has been completed. Freshmen and Sophomores register for two activities each semester, and Juniors and Seniors one activity. Exemption from this requirement is possible only by permission of the Classification Committee on the recommendation of the College Physician. Transfer students who met the Physical Education requirement of the institution from which they transferred need make only the amount required for their classification.

American History and Institutions: To be eligible for graduation all students are required by the laws of the State of California to pass examinations in American history and in American institutions, including the provisions and principles of the United States Constitution. While courses are helpful in preparing for the examinations, it is not possible to satisfy the requirements by the passing of any Pomona College course or courses. Examinations to satisfy these requirements will be given semi-annually in September and in the spring on dates which will be announced well in advance. Each candidate will be examined once without fee, but if he fails to pass the first time, re-examination will be given only upon presentation of a receipt from the Business Office for the payment of the usual \$2.00 fee for special examinations. Candidates who have failed once, however, must take re-examinations at the times scheduled for the regular examinations. These examinations will be objective in character and students should be able to achieve a satisfactory grade in each on the basis of a reading of a standard text book. This requirement must be met not later than the beginning of the junior year, and preferably as early as possible in the student's undergraduate career. Any student who has not satisfied these requirements by the beginning of his junior year will not be permitted to register until they have been fulfilled. Reading lists for those preparing for the examinations are obtainable from the departments of History and Government. Members of those departments will offer a series of public lectures each spring which will be mature interpretations of the subject, but they will not themselves provide all the factual information necessary to pass the examinations. Students desiring further information should consult with members of the departments of History and Government.

Foreign Languages: Although the College does not specify a knowledge of foreign language as a requirement for the degree, several departments do include this requirement in their programs of concentration. The student should ascertain the language requirement of whatever program of concentration he is planning to undertake, and, if he is not already prepared to meet it, should include the study of the required language in his Freshman and Sophomore years.

Graduation Fee: Every student expecting to graduate at the end of any given semester must file an application for graduation at the Registrar's Office not later than the beginning of his final semester and must include the graduation fee (\$10.00) with the payment of his other fees at the time of such registration. Failure to comply with these two requirements will automatically exclude a student from graduation that semester.

ACADEMIC REGULATIONS AND PROCEDURE

GRADES AND GRADE POINTS: In order to graduate, a student must earn two as many grade points as units; that is, an average of at least C grade in units for which he is registered. Grades and grade points are as follows:

- A (excellent) = 4 grade points per unit.
- B (very good) = 3 grade points per unit.
- C (average) = 2 grade points per unit.
- D (passing) = 1 grade point per unit.
- F (failure) = 0 grade points per unit. May be made up to a D.
- FF (failure) = 0 grade points per unit. May not be made up except by repeating course.
- I (incomplete due to illness)
- W (withdrawn with permission)

All F, FF, and I grades reported by instructors must be accompanied by a specific statement in writing of the reason for the grade. In case of an F or I grade, the statement must include a detailed explanation of how the grade can be made up. A copy of this statement is given to the student. All conditions for removing I and F grades must be met within seven weeks of the beginning of classes of the following semester, except that, in certain year courses, the deficiency in the first semester may be removed by successful completion of the work of the second semester, if the instructor recommends. An F grade cannot be raised above a D. I and F grades not satisfactorily made up within this time limit automatically become FF.

The I mark is given where illness on the part of a student justifies the granting of additional time for the completion of work. It may be changed to whatever grade the student earns. Instructors wishing to give an I grade for a justifiable cause other than illness must first receive permission to do so from the Classification Committee.

A FF grade can be made up only by repeating the course. Where the F or permanent F grade is incurred in a Physical Education activity, the same course must be repeated when next offered. A student may not continue in a year course other than Physical Education in which he has received a F in the first semester. The making up of work which has received the permanent F or FF grade does not expunge the grade from the record. Credit and grade points are, however, allowed for the repeated work.

The mark W is used where a student has withdrawn from a course in accordance with the provisions outlined under "changes."

Amount of work: The College regulates the amount of work a student may carry as follows:

The normal registration is 15 units of academic work plus Physical Education activities and/or Military Drill. In addition a student may elect for credit two of the following: Band, Choir, Orchestra or Play Production.

To register for 17 units of academic work a student must have earned 32 more grade points than the total number of units for which he registered the previous semester; to register for 18 units, 40 more grade points. To register for less than 12 units of academic work requires the permission of the Classification Committee.

Auditing of Courses: Regularly enrolled students who are paying full tuition may, in addition to the courses they are carrying for credit, audit other courses. They should enroll for them through the Registrar's Office. Others must pay the regular auditor's fee, see page 39.

Quality of work: A student is expected to secure each semester twice as many grade points as the total number of units of registration.

Near the end of the first five weeks and near the middle of each semester faculty are required to report all students doing unsatisfactory work for the period preceding the date of the report. In addition to these general reports, instructors may make reports at any time concerning individual students who are not in good scholastic standing. Advisers and deans receive such reports and take such steps as are advisable in each individual case.

At the end of each semester a complete report is made on every student. This report becomes a part of the student's record and indicates his standing in the courses for which he has been registered.

The college may at any time require the withdrawal of a student if the quality of his work seems to warrant such action. Decision in every such case is reached by the joint action of the Student Affairs and Classification Committees in consultation with the student's adviser.

Completion of work: To be counted as work completed in the course, papers, reports, drawings, and other assigned exercises must be turned in to instructors before the final examination.

Dismissal from Courses: A student who proves unable or unwilling to carry a course satisfactorily may be dropped from it by the Classification Committee upon the recommendation of the instructor at any time later than six weeks from the beginning of the course. The student's class card, with a grade of either FF or W for the course and an annotation reporting the fact of his having been dropped, shall be turned in to the Registrar's Office.

Class Attendance: Students are expected to maintain regular attendance at all class appointments in the courses for which they are registered.

While there is no general college requirement, each instructor has the right to establish such specific regulations regarding attendance as may seem best suited to his particular department.

Final Examinations: Seniors are excused from final examinations in the semester in which they take their comprehensive examinations. Final examinations are required of all other students in all subjects save as exceptions are made by action of the faculty.

The schedule of final examinations is prepared by the Courses of Study

Committee. No changes of examination dates may be made without the consent of this Committee. Examinations for individual students may be given at other than scheduled times only by consent of the Classification Committee and on the presentation to the instructor of a Business Office receipt for a fee of two dollars (\$2.00), unless this fee is remitted by the Committee.

Field Trips: Field trips are looked upon by the faculty as a legitimate part of certain courses. Permission for such trips is secured by instructors from the Courses of Study Committee at the opening of each semester. Instructors certify to the Registrar's Office the names of students participating in the trips.

Faculty Advisers: Each new student is assigned to a faculty adviser, with whom he works during his first year in college. At the end of that time, in the light of the student's interest, an adviser is assigned with whom the student will work during the remainder of his college course. If at any time a change is deemed wise it is made through the Dean of Students.

Pre-Registration and Registration: On appointed days shortly after the publication of the catalog in the spring and before Christmas vacation, in December all students must pre-register by filling out schedules listing the choice of subjects for the following semester. The fee for any change in the pre-registration is three dollars.

Pre-registration and registration of new students are conducted on the announced days at the opening of each semester.

Registration is completed by the payment of tuition and fees on appointed days at the beginning of each semester.

The fee for late pre-registration or late registration is \$2.00 for the first or second day following the appointed days, and \$1.00 additional for every day thereafter to a maximum of \$10.00.

Students are allowed credit for those courses only for which they are formally registered.

Students are not received later than two weeks from the beginning of class work.

Changes in Registration: Upon application to the Registrar's Office and with the approval of his adviser and the instructor concerned, a student wishing to modify his schedule of studies by addition or substitution of courses may do so within two weeks of the beginning of class work. All students except those registering for the first time are required to pay a change fee of three dollars. No change of registration is completed until the student has complied with the procedure established by the Registrar's Office.

Students withdrawing from laboratory fee courses within three weeks of the beginning of classes will be refunded the full fee. One-half the full fee will be refunded to those withdrawing in the following three-week period, but after six weeks from the beginning of classes no laboratory fees will be refunded.

A student may withdraw from a course within six weeks following the

beginning of class work by following the procedure prescribed by the Registrar's Office. Thereafter, the dropping of a course by a student shall entail for him a grade of FF for the course, except as circumstances may, in the judgment of the instructor and the Classification Committee, warrant a grade of W.

Matriculation: Matriculation implies the proven ability to carry college work. To this end the standing of all students is provisional until after they have been in residence for one semester. At that time those new students who are matriculated who have shown themselves in accord with the spirit of the College, have carried a minimum of 12 academic units, and who have made at least an over-all average of C on all work attempted during their term of residence. For those matriculating at the end of the first semester a public matriculation ceremony is held early in the second semester.

Students failing to matriculate at the end of their first semester of residence may be matriculated at the end of any subsequent semester provided they have met all the above requirements including an over-all average of C on all work attempted during their whole period of residence.

Students are not candidates for a degree until they have matriculated.

The Faculty Regulation on English: In the evaluation of all academic exercises the quality of English used by the student will be weighed together with the soundness and completeness of his thinking. Faculty members are expected to report to the Faculty Committee on English all students whose use of English is unsatisfactory. On the recommendation of this Committee, a student whose English is persistently unacceptable may be required to withdraw from the College at the end of any semester by the joint action of the Student Affairs and Classification Committees. Habitual and flagrant misspelling is considered a deficiency in English to which this regulation applies.

REQUIREMENTS FOR DISTRIBUTION IN THE LOWER DIVISION

All students must satisfy, by the end of the Junior year, the following requirements for distribution in the Lower Division. Normally the distribution requirements shall be met only by the Pomona College courses listed below unless exception is granted by the Classification Committee. Students from other institutions who plan to transfer to advanced standing in Pomona College are advised to scrutinize their programs carefully to be sure they have taken the required work and to consult the Registrar concerning any questions as to the acceptance of credit.

1. *English 1a, 1b.* A few students who make exceptionally high scores on the College Board English Examination and also on an exercise in composition set by the Department of English are exempt from this requirement. If they wish, such students may take the course, which is a study of composition and literature on the college level. Remedial work in English below the college level is under the supervision of a special faculty committee.

2. *A year course in a biological science*: Biology 1, Botany 12 and either 15, 17 or 103; Zoology 1 or 11.

3. *A year course in a physical science*: Astronomy 51; Chemistry 51; Geology 1 and 2; Physics 1; Physics 51.

Note: A student may satisfy the requirement in either Group 2 or Group 3 but not in both, by offering for admission a recommended unit of high school work in one of the sciences listed in the Group from which he wishes to be excused.

4 and 5. *Courses in two social science departments* (each a full year course): History 1; Government 51; Sociology 51 and 52; Economics 51; Political Economy 1; Education 53. Normally History 1 will be taken as one of the two courses.

Note: Sociology 51 and 52 constitute the integrated year course in sociology for students who expect to take only one year of sociology. For students planning more extensive work in sociology, Sociology 51 and any two higher numbered semester courses will meet the year course requirement.

6. *A year course in literature, art or music*: This requirement may be met by a course primarily concerned with the appreciation of literature rather than with the mastery of language, or by a year course in art or music. Acceptable courses are:

a. English 50 or six units from English 50a, 56, 57, and 58.

b. In the classics and in modern European languages, any course, in the original or translation, numbered above 100, except courses in composition and conversation; or any of the following: French 51 and 81, German 53, Latin 57, Spanish 71 and 91.

c. Any year course of not less than four units in art or music.

7. *A year course in philosophy or religion*: Philosophy 55; 57; Religion 1; 2; 65.

REQUIREMENTS FOR CONCENTRATION IN THE UPPER DIVISION

ALL STUDENTS must make a tentative choice of a major field of concentration during the Freshman year and a definite choice by the end of the Sophomore year. During their first two years students will be expected to complete the basic courses required by the department or departments of their choice.

Each student's program of concentration shall culminate in a final written comprehensive examination over the entire field in which he has concentrated. The student must pass this examination in order to qualify for graduation. In a few departments research projects take the place of the written examination.

The Comprehensive Examinations must be taken at the officially scheduled times. Students who have failed Comprehensive Examinations may request permission to retake them at the opening of the college year and at the end of each semester. Such applications must be in the hands of the department concerned by September 1, December 1, or April 1. A fee of \$10 will be charged for a re-examination which is taken at other than the times set for

regular comprehensive examination. All students who intend to take the regularly scheduled comprehensive examinations must file an application with the Registrar by December 1 or April 1.

A program of concentration leading to the comprehensive examination must include not less than twenty-four hours and not more than thirty-six hours of work in courses numbered over 100 in the chosen field. These limits apply to that part of the student's program on which the comprehensive examination will be set. For the entire four years of college, not more than a total of fifty-two units in any one department (in Music not more than a total of sixty units) may be counted toward graduation.

A few concentrations have been arranged so as to permit a combination of courses in various departments. In many cases concentration will also be preparation for professional study or other specialized training after graduation.

For concentration in some fields a reading knowledge of at least one modern foreign language is necessary; in many fields a command of two is desirable. It is to the advantage of the student to acquire as much as possible of this reading knowledge before entering college, and whatever additional training is needed should be taken early in his college course.

The requirements for concentration in any department will be found before the list of courses offered by the department. The several programs of concentration in fields consisting of related courses in more than one department follow immediately.

Concentration In Special Fields

[IN ADDITION to concentration programs in the various departments, the following programs in special fields are available:

INTERNATIONAL RELATIONS

THIS PROGRAM is designed for students having an interest in the political, economic and cultural aspects of international relations as well as for those contemplating careers in diplomatic service or foreign commerce. All those electing this area of concentration will be required to have a reading and speaking knowledge of at least one modern foreign language. Some evidence of ability to read and speak a foreign language (French, Spanish, Chinese, German, or Russian) must, except in the case of Chinese, be submitted to the program adviser by the beginning of the junior year, and the language examiner concerned must certify the competence of the student in that language not later than the close of the first semester of the senior year.

Prerequisites: History 1, 55; Government 51; Economics 51; and a modern foreign language as indicated above. (American Political Economy may not be offered in fulfillment of one of the requirements for distribution.) On registering for History 55, the student should arrange with the instructor to devote the bulk of his collateral reading to American diplomatic history.

Lower-division recommendations: Sociology 51; Psychology 51; Statistics (Economics 57).

PROGRAM OF CONCENTRATION

30 upper-division units as follows:

American Foreign Policy (Government 165), preferably in the junior year; International Politics and Organization (Government 167); International Law (Government 168); Money and Banking (Economics 103); and International Trade (Economics 154) plus 15 additional units selected in consultation with the adviser. Normally twelve of these must be chosen from one of the following areas: American-European (including Soviet) relations, Latin American Affairs, Oriental Affairs.

Junior Transfers: Students transferring to Pomona at the beginning of the junior year are eligible to concentrate in International Relations provided the prerequisites are met before entrance or can be satisfied in the junior year.

For the exceptionally promising student a program of honor study in International Relations can be arranged. The specific requirements beyond the requisite grade point average may be met by six units covering Government 167 and either Government 166 or 168 and by six units of advanced reading and directed research culminating in the presentation of a thesis.

Note: Students intending to do graduate work in International Relations at the University of California (in Berkeley or Los Angeles) should either major in government or at any rate include in their programs 20 appropriate upper division units in government.

FOREIGN AREA AND LANGUAGE CONCENTRATION

EAST ASIA AREA CONCENTRATION

POMONA COLLEGE has one of the best oriental libraries on the Pacific Coast, affording excellent resources for students concentrating on East Asia.

Requirements: A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year's work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Art 117, 153; Philosophy 126.

Recommendations: It is advisable for a student concentrating in this field to have at least the following introductory courses in certain related fields: Political Economy 1; Government 51; History 1; Economics 51; Sociology 51. These should normally be taken in the freshman and sophomore years. Some students will wish to add, in their junior and senior years, Economics 154; Government 167; History 114; Sociology 110.

It is also highly desirable for students studying China intensively to have some work in the Chinese language, three years of which (Oriental Affairs 52, 151, 181) are offered.

Because several of the above required courses are offered only in alternate years, students concentrating in this area should plan their course programs well ahead.

LATIN AMERICAN AFFAIRS

CONCENTRATION in Latin American Affairs is possible in connection with the concentration in International Relations, see page 73. Concentration on Latin America is designed for students looking toward teaching Latin American history, economics, etc.; toward government service in Latin America; toward a business career in Latin America. Students interested in this field should consult with Mr. Herring or Mr. Crowell.

MODERN SOCIAL INSTITUTIONS

For those students whose needs and interests would be better satisfied by a course of study somewhat broader than that in a normal major, Pomona offers a program of concentration in Modern Social Institutions drawing on the offerings of several departments. Administered under the chairmanship of Mr. Luther J. Lee, Jr., of the Department of Government, it enables a student to pursue a course of instruction having for its focus the institutional life and social problems of the American people. Programs in this field have at their core certain specified courses in the social sciences and they include in the senior year a major written project which is counted as a part of the comprehensive examination.

Students electing this concentration must offer 36 units of upper division

work, not less than six nor more than 15 of which may be earned in one department. In each case, however, the program must include the specified core courses as indicated below. (No provision is made for combination embracing work in but two fields for the reason that nearly every program of normal concentration permits a student desiring to do so to arrange such a combination as, for example, sociology and psychology.) The core course prerequisites being presumed, include History 55a, 55b, History of the United States (taken, if possible, in the sophomore year); Government 16 American Foreign Policy; Economics 111, Labor Economics; Sociology 11 The American Community; and, in the senior year, Government 101, American Political Ideas; and either Government 157, Parties and Pressure Groups or Government 160, Public Opinion and Propaganda.

In satisfying the college requirements for distribution in the lower division and in supplementing them it is recommended that students registered for this concentration endeavor to include the introductory courses in each of the social sciences and in psychology and that they give serious consideration to meeting requirement 6 (art, music, or literature) either by a second year of some foreign language or by English 50a, 50b, Great English Authors. English 105a, 105b, American Literature, is strongly recommended in the junior year.

In arranging his program of concentration the student, in consultation with his adviser, may select the appropriate number of units from the department offerings listed below. Asterisks indicate that the course or courses so marked must be included if any upper division units from the department are to be submitted as a part of the required 36 units.

Economics 103, 104, 105, 109, 110, 111*, 154, 158

Education 104, 105, 109, 153, 154

English 103a, b, 104a, b, 105a, b*, 192

Government 101*, 103, 125, 126, 157* or 160*, 165*, 167

History 107a, b, 113a, b, 114, Advanced American History* or its equivalent

Philosophy 120, 126, 151, 152, 154

Psychology 103, 108, 135, 154

Religion 102, 142, 160

Sociology 102, 112*, 152, 153, 154

Pre-Professional Programs

THE academic program of Pomona College furnishes preparation for many of the professions. Indicated below are suggested programs which might be combined with concentrations in certain fields.

PRE-MEDICAL COURSE

CERTAIN SUBJECTS have been designated by the Council on Medic

Education of the American Medical Association as minimum requirements for entrance to medical colleges. Many of the leading medical colleges, however, have requirements well beyond this minimum, and are selecting only those who are best prepared and have demonstrated the highest scholastic ability and laudable personal traits. Pre-medical students are advised not to attempt to crowd the minimum requirements into three years of college work, but to build, in more leisurely fashion, a broad educational foundation. Breadth of view, culture, and a thorough grounding in the biological and physico-chemical sciences are the objectives of the pre-medical course. It is important to note that these objectives are stressed by all medical colleges.

Below is outlined a curriculum which meets the requirements for graduation from Pomona College and the entrance requirements of most of the medical colleges in the United States. It can readily be modified, as regards both science and non-science courses, to meet the specific requirements of any medical college and the special needs of individuals.

REQUIREMENTS FOR CONCENTRATION

Lower Division Courses: Zoology 1, 60; Chemistry 1, 59; Physics 51; Foreign Language, German preferred.

Upper Division Courses: Zoology 115, 120; Chemistry 106, 110, 111, and additional units selected from upper division physical or biological science courses for which prerequisites have been met to make a minimum of 24 units.

SUGGESTED COURSES

FRESHMAN YEAR: English 1; Chemistry 1; Zoology 1; History 1.

SOPHOMORE YEAR: Chemistry 110, 111; German 1; Zoology 60, 115. Electives from literature, art or music; philosophy or religion.

JUNIOR YEAR: Chemistry 59, 106; Physics 51; German 53. Electives from social sciences.

SENIOR YEAR: Zoology 120.

Most medical colleges require a reading knowledge of either French, German or Spanish, with a preference for German. Students planning to study medicine should anticipate these requirements by taking some language in high school with the view toward completing at least one year in college. Also, students will find it advantageous to take trigonometry in high school. In

addition students should consult with their adviser to determine the proper time to take the Medical College Admission Test, taking of which is an entrance requirement of most medical colleges.

Students interested in pre-nursing should consult the Zoology Department.

PRE-ENGINEERING PROGRAM

AS THE ENGINEERING profession has assumed a more important role in modern society, there has been a growing demand for professional engineers who have, in addition to technical ability and training, a broad understanding of the economic, social, and political forces which are molding modern civilization. Recognition of these requirements for the modern engineer may be found in liberalized curricula of leading engineering schools.

Students at Pomona College who plan to enter a professional engineering school have an opportunity to obtain an excellent foundation in mathematics and physical science in addition to a well-balanced liberal training. While no professional engineering courses are offered at Pomona, and no engineering degree is granted at Pomona, it is possible in some cases for students to enter a graduate school of engineering after being graduated from Pomona with a concentration program in physical science. Those who plan to continue with engineering training after leaving Pomona should consult with members of the staff in physical science who are acquainted with engineering school requirements.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from M.I.T. after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona. For those electing the plan the following program is suggested.

FRESHMAN YEAR

English 1a, 1b	6 units
Mathematics 1a, 1b	6 units
Physics 51a, 51b	8 units
Electives	12 units

The 12 elective units are for distribution. If Art or Music are included, the remaining 2 units should be in Engineering Drawing.

SOPHOMORE YEAR

Mathematics 65a, 65b	6 units
Chemistry 1a, 1b	8 units
Engineering Drawing	2 units
Electives	16 units

12 elective units are for distribution, 4 are optional.

JUNIOR YEAR

Mathematics 151a, 151b (or Mathematics 125)	6 units
Physics 113a, 113b	6 units
Physics 141a-141b, 142a-142b	8 units
Physics 110	3 units
Mathematics 185a	3 units
Electives	6 units

The six elective units are for distribution.

Optional Courses: Engineering Drawing 40a, 40b, 102; Physics 103, 154, 155; Geology 1a-1b; English 63; Speech 52a, 52b; Surveying (offered in Summer session).

Those electing the above program should consult with the head of the Mathematics Department or the Physics Department concerning concentration requirements.

PRE-LEGAL PROGRAM

ADEQUATE PREPARATION for the study and practice of law requires completion of an undergraduate program in the liberal arts leading to the baccalaureate degree. Concentration in government, economics, or history is recommended though not to the exclusion of appropriate courses in other fields.

Students intending to study law following graduation should avail themselves of opportunities to widen their intellectual horizons and to develop their capacity for intensive inquiry and for effective and precise expression, both written and oral. While in the lower division they should include in their program, courses in logic, psychology and public address. During their years of concentration whether the field be government, economics, history or otherwise they should study, among other subjects: introduction to law, constitutional and administrative law, American political ideas, parties and pressure groups, political theory, American history, English history, accounting, public finance, labor economics, industrial organization and public policy, money and banking, corporation finance and ethical theory. It is also advisable to secure a thorough training in expository writing.

PRE-THEOLOGICAL TRAINING

STUDENTS PLANNING to prepare themselves for Seminary or Divinity School training, with a view to entering the ministry, missionary work, or religious education, are advised to secure a well-rounded college education.

Concentration in religion in their undergraduate program is normally deemed inadvisable; such students could most profitably fulfill their requirements for concentration in one of the following departments: English, History, Philosophy, or Sociology. In any event, the total program for such students should include all of the following as a minimum breadth of preparation: four semester courses in English (composition and literature); four semester courses in foreign language; two semester courses in natural science including at least one course in biology; four semester courses in social science, including at least one course in social psychology, one in sociology, and one in economics; two semester courses in history; two semester courses in philosophy; and six semester courses in religion, including Religion 1, 2 and 65.

PRE-JOURNALISM TRAINING

ON THE RECOMMENDATION of graduate schools of journalism and of distinguished journalists, students planning a career in journalism are advised to concentrate in any principal field of study, to secure a broad and liberal education, and to improve their mastery of the

of writing. Courses in the social sciences, literature, the arts, and foreign languages are strongly recommended. Study in the natural sciences is often desirable, and for some kinds of journalistic work concentration in one of the sciences is advisable.

Instruction in journalistic practices is offered specifically in English 60, and general training in accurate observation and reporting is an important part of all writing courses: English 1, 63, 64, 111, 151.

TEACHING AND EDUCATIONAL ADMINISTRATION

Requirements: In California every public school teacher must have a credential. This is issued by the Board of Education of the County in which the teacher is employed upon presentation of a credential application to the State Board of Education.

The State requires students who wish a secondary credential to complete a Bachelor's degree and one year of graduate work. The State permits the fulfillment of elementary credential requirements in completion of the Bachelor's degree only. However, Pomona College considers the five year program the desirable one for elementary as well as secondary teachers and its program is organized on a five year plan for both elementary and secondary teachers. The fifth year may be taken at the Claremont Graduate School, one of the Associated Colleges at Claremont, or at any other accredited graduate school.

Claremont Graduate School is authorized to recommend candidates for the following credentials: General Elementary; Junior High School; General Secondary; Junior College; Special Secondary in Art, Music, Physical Education; Elementary School Administration; Secondary School Administration; Supervision; Child Welfare and Supervision of Attendance. In addition, Claremont Graduate School offers work to satisfy wholly or in part requirements for various other credentials issued by the State Department of Education.

Inasmuch as requirements vary considerably for different credentials, students who expect to enter the profession of education in California or elsewhere should consult the Education Department concerning these requirements before registration. The requirements for the secondary credential in California involve collegiate preparation in two fields commonly taught in the secondary schools: a "teaching major" representing 36 units and

a "teaching minor" representing 20 units. Students majoring in areas not offered in secondary school curricula must present two "teaching minors." Thus, most prospective secondary school teachers will concentrate at Pomona College in the area or areas they expect to teach.

Students preparing for the elementary teaching credentials are not required to present a specific teaching major. Several concentrations (i. e. majors) are acceptable in this field (i. e. psychology, art, music, physical education) but the concentration in education is designed more specifically to serve prospective elementary teachers.

SUGGESTED PROGRAM

THE EDUCATION concentration statement detailed on page 110 is the basic program of studies for those intending to major in education as preparation for elementary school teaching. Courses beyond the concentration will vary with the individual student, but the student should endeavor to include further work in psychology, sociology, physical education, applied music and art, as well as basic study in history and economics. Students preparing for the general secondary credential will ordinarily concentrate (for credential purposes, major) in those fields in which they expect to teach, but are advised to take as many pre-professional and allied courses as their schedules will permit.

PRE-LIBRARY TRAINING

BROAD GENERAL TRAINING and specialized knowledge in a subject field are essentials for students planning to become librarians. The ability to use the typewriter with accuracy and speed, and a reading knowledge of at least two modern foreign languages are usual prerequisites to admission to a library school. All librarians will find a knowledge of statistical methods supremely useful. Those who intend to go into public library work ought to have a understanding of the organization and problems of government and municipal government particularly, while those aiming at the college and university field must have a good background in the history and theories of higher education. Students expecting to take up public school library work in California are required to complete nine hours in education. Although it is not a prerequisite, actual experience in a library is a distinct advantage.

While concentration in pre-library training is not offered, students looking forward to work in this field are strongly recommended to take the following courses: English 101 or 103, 105; History 113 or 103 or 107; six hours of advanced work in philosophy, Psychology, or Foreign Languages. Other recommended courses include Education 104, Psychology 107, Art 51, Economics 57, Philosophy 55, Comparative Literature 181.

SOCIOLOGY

SOCIAL WORK. Students who plan to follow social work as a profession should attend a graduate school of social work. The expansion of social services in recent years has created such a heavy demand for social workers that in a few limited fields college graduates are accepted without graduate training, but they cannot expect to be advanced to the higher administrative positions.

The best undergraduate training for students expecting to enter graduate schools of social work is a broad liberal arts education, with special emphasis upon the social sciences such as the sociology concentration provides. Introductory statistics and psychology should be included, also Economics 111 and Government 103 will be found useful. Those planning to work in the Pacific Southwest should learn to speak Spanish.

SOCIAL RESEARCH. There is considerable demand for research workers in government agencies—federal, state, and local—as well as in private foundations. Usually at least a master's degree is required, including a knowledge of statistical method. The regular undergraduate concentration in sociology will prepare one adequately for entrance into graduate school, for which there are quite a number of scholarships and fellowships available for outstanding students.

TEACHING. Students preparing to teach sociology should follow the regular sociology concentration. A master's degree is usually essential for teaching in high schools and junior colleges, and a doctor's degree for teaching in colleges and universities. Graduate scholarships, fellowships, and teaching assistantships are available in a good many universities for outstanding students.

Honors Study

Honors study is aimed at a deeper and more scholarly grasp of the student's chosen field than is customary; it is also aimed at broadening his intellectual life by the discovery and exploration of topics relevant to the special subject of inquiry. Students who show the capacity and the inclination for more than average intellectual achievement may be permitted during their Junior and Senior year to enroll for honors study.

An honors program frees the student's energies by allowing him through a flexible use of instruction and courses of study, to spend a considerable portion of his time in independent study. Released from as much academic routine as his instructors may approve, an honors candidate thus assumes responsibility for a more profound and wider knowledge than is expected of the ordinary student. He will be admitted to honors status only upon the basis of a record which shows promise of competency to carry on work of high quality; he will be continued only if he exercises initiative and self-direction, places scholarship consistently first among his interests and maintains a high standard of scholarship in his honors program as well as in his other work.

CONDUCT OF PROGRAMS

General administration of honors work is vested in the Courses of Study Committee, which reviews the programs of honors study planned by departments, divisions, or inter-divisional committees and administers the faculty regulations pertaining to them.

Eligibility: A minimum grade-point average of 3.0 is a uniform requirement throughout the college for enrollment in honors study. Aside from this requirement, the eligibility of a student for honors status is determined by the department or division in which he will work.

Hours: The number of hours allotted to honors study must be not less than twelve and not more than eighteen. Within the limits of these hours a student may be excused from formal classes. The method of honors study varies in the divisions: it may be carried on in seminar or laboratory projects, or it may consist of independent study or creative work.

The general requirement limiting to a total of fifty-two units the work which may be taken in one department applies also to honors programs. The comprehensive examination in an honors program, however, may cover a greater area than does the Senior comprehensive examination required of all students.

Application: Application for enrollment should normally be made at the end of the Sophomore year. The application form, obtainable at the Registrar's office, must include a statement of the program which the applicant intends to follow and must be approved by the faculty member in charge of the program. For detailed information concerning divisional and departmental programs the student should consult members of the department or division in which he would like to undertake honors study.

Withdrawal: A student may withdraw from honors status at his own request with the approval of the division concerned. In case the performance of a student falls below a standard of high quality either in his honors work or in his courses, he may be withdrawn from honors status either by the division or by the Courses of Study Committee.

Examinations: Evidence of the success of the student in his honors work is measured by written and oral examinations administered toward the close of the Senior year. Normally all or part of the Senior comprehensive examination in a field of study will form part of the honors examination in that field. With regard to his ordinary courses the student is subject to the requirements normally pertaining to them. He may be exempted at the discretion of the instructors concerned from taking course examinations within the field of his honors program.

A student's performance in his honors examination and in any other work required for the completion of his honors program is judged by the department or division in accordance with procedures approved by the division, or, in some instances, by an inter-divisional committee with the approval of the Courses of Study Committee. A student who has maintained in all his work a grade-point average of 3.0 and who has met successfully all the requirements of his program of honors study will be graduated with a notation of that accomplishment. He will be eligible also for general commencement honors described below. A student who fails to

meet the standards of his honors program but who in his honors hours completes work worthy of credit will be recommended to the Courses of Study Committee for graduation in course (*rite*)

COMMENCEMENT HONORS

Pomona College awards the distinctions *cum laude*, *magna cum laude*, and *summa cum laude* to graduating seniors who have distinguished themselves in the over-all average of their work in the senior comprehensive examination.

GRADUATE WORK IN THE CLAREMONT GRADUATE SCHOOL

Graduate work in history, oriental affairs, Latin America, political economy, psychology, literature, philosophy, the biological and physical sciences, and the fine arts and music, along with professional work in public school education and psychology, conducted by the Claremont Graduate School, whose faculty includes members of the staffs of Pomona College, Scripps College, and Claremont Men's College, as well as its own appointees. A catalog will be furnished upon request to the Dean of the Claremont Graduate School, Harper Hall, Claremont, California.

GRADUATE RECORD EXAMINATION

MANY OUTSTANDING graduate or professional schools require request that applicants for admission, as well as for fellowships and scholarships, take the Graduate Record Examination administered by Educational Testing Services, the national academic testing organization. The Graduate Record Examination tests general knowledge in the fields of study covered by the Pomona College curriculum and does not require special preparation. Students who intend to enter graduate or professional schools are advised to write early in their senior year directly to the Graduate Record Office, Educational Testing Services, 437 West 59th Street, New York City 19.

Courses of Instruction

ELEMENTARY courses numbered below 50 are designed primarily for the freshman year. Courses numbered 50 to 99 are either those which follow the lower course or are the more advanced beginning courses. Courses numbered over 100 are for juniors and seniors and may not be entered by students without previous work in the same field, except by written permission of instructors. Courses numbered NC carry no academic credit. In the departments a definite sequence of courses must be followed. When course numbers are connected by a hyphen they cover a common subject and the entire sequence should be taken. When course numbers are connected by a comma, independent credit is given for the work of the first semester. Entrance to the second semester is by permission of the instructor. Any course may be withdrawn if the enrollment is less than five. Except by special permission, credit for only one unit of work in a department is not allowed.

COURSES IN THE ASSOCIATED COLLEGES

Following the departmental offerings of Pomona College are listed certain courses in Scripps College and Claremont Men's College open to Pomona sophomores, juniors and seniors under approved conditions. Normally only those courses so listed are open to Pomona College students. It should be noted that most of the Scripps College courses are year courses and consequently credit cannot be allowed for only one semester. To enroll in courses other than those listed, students must first obtain a permission slip from the chairman of the corresponding department at Pomona. Each regular student in residence in Pomona College shall, however, elect not less than half of his registration each academic year from courses in Pomona College. Normally freshmen will take their entire programs of study in the college of their residence. In a few departments involving the use of physical equipment and laboratory space, such as art and the sciences, it is necessary to impose limits on the exchange privileges.

Certain graduate courses in the Claremont Graduate School are open to Pomona seniors who are concentrating in the fields

in which the courses are offered. Permission must be secured from the chairman of the department in which the senior is concentrating and from the instructor giving the course.

Where a course in Scripps, Claremont Men's College, or Graduate School duplicates the material of a Pomona course, credit will not be given for both.

DIVISIONS

DIVISION I [*Humanities*] Art, Chinese, Comparative Literature, English, French, German, Greek, Italian, Latin, Music, Philosophy, Speech and Dramatics, Spanish

DIVISION II [*Natural Sciences*] Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Military Science, Physics, Psychology, Zoology

DIVISION III [*Social Sciences*] Economics, Education, Geography, Government, History, Oriental Affairs, Physical Education, Religion, Sociology

Art

Three types of concentration are open to students of art within the department: Painting (including Drawing and Design), Sculpture, and Art History. Specialization may be determined in the second year, but correlation between the practice of the two and three dimensional arts and historical and aesthetic study is maintained.

A sense of design and an appreciation of and ability to render form must be exhibited in the basic courses as the foundation for further specialization. The student will be expected to present his work in the Department Exhibition at the end of each year. A comprehensive examination is required of all candidates for the Bachelor of Arts degree.

For each unit of credit in Applied Art, there is required a minimum of one hour of assigned reading and two hours of studio work per week. Students are urged to prolong these periods when other work permits.

The total number of hours of Applied Art accepted toward graduation is 16, so distributed as not to exceed 8 hours in courses numbered under 100. In courses where lecture and laboratory work are combined, the work is counted half theory and half applied.

CONCENTRATION REQUIREMENTS

In addition to the required courses listed in the concentrations described below, sufficient courses to complete a total of 24 units of upper division work

re to be chosen from Upper Division Electives with the consent of the chairman of the department.

PAINTING

Lower Division Requirements: Art 3, 9, 51, 61.

Upper Division Requirements: Art 116, 120, 185.

Upper Division Electives: Art 105, 107, 115, 117, 178, 185, or Scripps II-121, II-122, II-123, II-130, II-141.

SCULPTURE

Lower Division Requirements: Art 3, 9, 51, 65.

Upper Division Requirements: Art 107, 116, 162.

Upper Division Electives: Art 105, 115, 117, 120, 178, 185, or Scripps II-121, II-122, II-123, II-130, II-141.

ART HISTORY

Lower Division Requirements: History 1, Art 3, 9, 51.

Upper Division Requirements: Art 115, 116, 117, 178.

Upper Division Electives: Art 105, 107, 120, or Scripps II-121, II-122, II-123, II-130, II-141.

SPECIAL PROGRAM

WITH APPLIED ART TAKEN AT SCRIPPS COLLEGE

Lower Division Requirements: History 1, Art 51, Art II-2, and one of the following: Art II-21, II-22, II-23 or II-30.

Upper Division Requirements: 6 units of upper division European or Oriental History, 9 units of Art History at Pomona College, 18 units of Applied Art at Scripps College.

3b. DESIGN AND DRAWING. *Mr. Zornes*. First semester: basic theory as approach to the study of graphic design (drawing and painting), planned to insure the student's ability in the common language upon which future study and class criticism is based. Grade will be based upon the quality of studio work and written examination. Oil paint on paper, prepared for the purpose, will be the medium for studio work. Second semester: continuation of basic theory and application to problems of painting and drawing in landscape, figure and portraits study and other forms of graphic expression. 2 units. Two sections. *MW, 10-12; MW, 1:15-3:15*.

9b. SCULPTURE. *Mr. Lawler*. A basic course in sculpture, comprising a study of the nature of form. Forms, both abstract and realistic, will be constructed in a variety of media. 2 units. Two sections. *TTh, 1:15-3:05; Th, 3:15-5:05*

1-51b. HISTORY OF ART. *Mr. Foster*. Study of the historical development of art with especial attention to national genius and stylistic expression. The Ancient, Classic, Early Christian and Byzantine Periods will be studied in the first semester, and Medieval, Renaissance, Baroque, Neo-Classic, Romantic, Realistic and Contemporary Art in the second semester. This course or its equivalent is normally a prerequisite for advanced courses in the History of Art. 3 units. *MWF, 9*.

55a, 55b. ANCIENT ART AND ARCHAEOLOGY. *Mr. Karo*. A survey of the art of Greece and Rome, in reference to the life of both countries and their neighboring civilizations (Egyptian, Near Eastern, Italic, Etruscan, etc.). The first semester will cover Greece, from the prehistoric Minoan-Mycenean culture to Alexander the Great. Hellenistic Greece, Rome and the Roman World are reserved for the second semester. 3 units. *MWF, 10.*

61a, 61b. FIGURE DRAWING AND GRAPHIC DESIGN. *Staff*. The rendering of form with emphasis on the development of the student's drawing ability. 2 units. *TTh, 9-11.*

65a-65b. ADVANCED SCULPTURE. *Mr. Lawler*. Continuing study of the nature of form. Work from the model, modeling in relief. Consideration of sculptural techniques and materials. 2 units. Two sections. *TTh, 1:15-3:05; TTh, 3:15-5:05.*

105a, 105b. ADVANCED FIGURE DRAWING AND GRAPHIC DESIGN. *Staff*. 2 units. *TTh, 9-11.*

107a-107b. SCULPTURE FROM LIFE. *Mr. Lawler*. Modeling from the figure. Composition in relief and in the round. 2 units. Two sections. *TTh, 1:15-3:05; TTh, 3:15-5:05.*

115. FOUNDATIONS OF MODERN ART. *Mr. Foster*. A survey of the significant stylistic trends of the eighteenth and nineteenth century art as background to the detailed study of the development of Impressionism, Expressionism, Cubism and various contemporary schools of art. 3 units. First semester. *TThS, 10.*

116. FUNDAMENTALS OF ART THEORY. *Mr. Foster*. Studies in the relation of literary discussion of art to the development and appreciation of the fine arts. Discussion of critical principles of leading art historians; aesthetic systems and principles of art history; practical exercises to test the validity of the various theories. 3 units. Second semester. *TThS, 10.*

117a-117b. ART OF THE FAR EAST. *Mr. Foster*. A survey of the arts of China, Japan, and Korea from prehistoric times to the nineteenth century, studying the historic, technical, aesthetic, and symbolic aspects. First semester: Prehistory through T'ang. Emphasis on Ancient Ceramics, Bronze, and Sculpture. Second semester: Sung through nineteenth century. Emphasis on Chinese, Japanese and Korean painting and Japanese prints. 3 units. *MWF, 11.*

120a-120b. PAINTING. *Mr. Zornes*. Practice in still-life and landscape painting adapted to a study of the techniques of various historic schools of painting. These are explained by means of a system of set palettes which afford an understanding of painting principles and an opportunity for the development of individuality of manner. 2 units. *T or Th, 1:15-4:05 and arranged.*

153b. CHINESE PAINTING. *Mr. Foster.* The fundamentals of art history in China, origins of the pictorial tradition, great masters of landscape, figure, bird and flower painting, philosophy and technique of Chinese painting, mannerism and decoration in the seventeenth century. 3 units. Arranged.

162a-162b. CREATIVE SCULPTURE. *Mr. Lawler.* A course open only to advanced students of ability for the development of original problems in various media. 2 units. Two sections. *TTh*, 1:15-3:05; *TTh*, 3:15-5:05.

176a, 176b. PROBLEMS IN ANCIENT ART AND ARCHAEOLOGY. *Mr. Karo.* A seminar permitting advanced research in this field. Prerequisite: Classics 55 or Art 51, 116 and permission of the instructor. With departmental permission concentrators in Art History may substitute Art 176 for 178. Arranged. (Omitted in 1950-51.)

178a, 178b. READINGS IN HISTORY OF ART. *Mr. Foster.* The study of a particular period, school, or movement in art. Offered primarily for majors in history or theory of the subject. The course is designed to enable the student to become intimately familiar with the visual manifestations in painting, sculpture, architecture, or one of the minor arts of an era in which he may be pursuing a study in philosophy, literature, or other field. Prerequisite, Art 51, and Art 116. 3 units. Arranged.

185a, 185b. PROBLEMS IN APPLIED ART. *Mr. Zornes.* Opportunity is given for the pursuit of individual projects in the graphic arts to suit the interest and ability of the student. (May be repeated.) 1 to 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

1. FUNDAMENTALS OF DRAWING AND DESIGN. *Staff.* Year course. Open only by special permission. *MWF*, 1:15-4:05.

11. BEGINNING PAINTING. Year course. Prerequisite II-2 or its equivalent. *TTh*, 1:15-4:05.

12. BEGINNING WEAVING. *Mrs. Stewart.* Year course. Prerequisite II-2 or its equivalent. *MWF*, 1:15-4:05.

13. BEGINNING CERAMICS. *Mr. Petterson.* Year course. Prerequisite II-2 or its equivalent. *MWF*, 1:15-4:05.

14. BEGINNING SCULPTURE. *Mr. Stewart.* Year course. Prerequisite II-2 or its equivalent and permission of instructor. *MWF*, 1:15-4:05.

15. ADVANCED PAINTING. *Mr. McFee.* Year course. Prerequisite II-2 or its equivalent. *MWF*, 1:15-4:05.

16. WEAVING. *Mrs. Stewart.* Year course. Prerequisite II-2 or equivalent. *MWF*, 1:15-4:05.

17. CERAMICS. *Mr. Petterson.* Year course. May be repeated for credit. Prerequisite II-2 or equivalent. *TTh*, 1:15-4:05.

II-130. SCULPTURE. *Mr. Stewart*. Year course. May be repeated for credit. Prerequisite II-2 or equivalent and permission of instructor. *MWF, 1:15-4:05*.

II-141. ARCHITECTURAL DESIGN AND PLANNING. *Mr. Whitney Smith*. Year course. Prerequisite II-2 or equivalent. By permission of instructor. *TTh, 1:15-4:05* and arranged hour.

I-70. PRINTING. *Mr. Foster*. One or two year course. *TTh, 1:15-4:05*. Registration by permission of the instructor.

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Graduate work in the history of art and architecture and in applied art available under the auspices of the Claremont Graduate School.

Astronomy

The general prerequisites for upper division courses or for concentration in the department are Astronomy 51, its equivalent, or a satisfactory background in science. Students transferring from Junior College or elsewhere may also qualify for upper division registration or departmental concentration by establishing the same prerequisites.

A basic program for concentration in Astronomy, with minor in Mathematics and Physics, should include Astronomy 155, 156, and at least six units of 180, together with not less than six units of mathematics selected from Mathematics 52, 151, 152, and four to seven units from Physics 153, 154, and 155. In special cases related upper division courses in chemistry or geology may be substituted in the minor fields. A reading knowledge of French and German is also recommended.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 102; Geology 59, 110 and 112, plus additional upper-division units totaling a minimum of 24, selected from Astronomy 103, 151 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 161. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

51a-51b. DESCRIPTIVE ASTRONOMY. *Mr. Whitney*. A study of historical and modern astronomy presented in non-technical form. Develops acquaintance with the planets and constellations and an appreciation of man's relation to the surrounding universe. Regular evenings with the telescopes at the Brackett Observatory are supplemented by project assignments and field excursions to the astronomical centers of the region. Classroom two hours per week; observatory, one period per week. Laboratory fee \$2.00 per semester. 3 units. *MWF, 11*. (See 151a-151b below.)

102a, 102b. PRACTICAL ASTRONOMY AND METEOROLOGY. *Mr. Block*. Consists of sun observations with telescope and spectroheliograph; studies of clouds

mations and air mass movements related to current weather and readings the Weather Bureau instruments at the Brackett Observatory. Photographic recording of observations introduce studies of the basic principles of the photographic process, and characteristics of various films and plates. Facilities also offered for those wishing to make their own telescope mirrors. Two ss periods and one laboratory period. Laboratory fee \$2.00 per semester. units. Arranged.

4. NAVIGATION. *Mr. Whitney*. A basic course in the principles and practice marine and air navigation. Observations of sun, moon and stars with transits and transits of different types, and use of the latest almanacs and navigation tables provide practical experience in solving navigation problems. units. Second semester. Laboratory fee \$2.00. Class TTh, 1:15. Laboratory arranged.

5a-151b. PROBLEMS IN DESCRIPTIVE ASTRONOMY. *Mr. Whitney*. Offered currently with and related to 51a-51b. May be elected by students having satisfactory background in the physical sciences. Preliminary conference with the instructor required. 1 unit. Arranged.

6. CELESTIAL MECHANICS. *Mr. Whitney*. A short course in the application the laws of mechanics and gravitation to the motions of the heavenly bodies with problems on the prediction of eclipses and occultations and on the computation of the orbits of comets. 3 units. First semester. Arranged.

7. ASTROPHYSICS. *Mr. Whitney*. Considers the applications of the principles of modern physical science and analyses to the study of stellar and cosmic problems and the reciprocal contributions of astronomical research. Laboratory observations are both visual and photographic. Class one hour, laboratory two periods. Laboratory fee \$2.00. Second semester. 3 units. Class W, 2:15. Laboratory arranged.

8. INVESTIGATIONS IN ASTRONOMY. *Mr. Whitney*. A unified program of investigation is followed in some special field such as variable stars, lunar eclipses, solar phenomena, etc. Each semester, 1 to 4 units. May be repeated for credit. Laboratory fee \$2.00 per unit per semester. May also be elected for advanced study in navigation. Arranged.

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Graduate work in Applied Astronomy is available under the auspices of the Fremont Graduate School.

Biology

Requirements for concentration: *Lower Division and Intermediate Courses*: Botany 12, 15, 17, 103; Zoology 1 and 60. *Upper Division Courses*, Biology 112 and two courses in Group I and three courses in Group II (or Biology 105 may be substituted for one course in either group): Group I, Botany 105, 107, 123 or 158; Group II, Zoology 120, 121, 123, 128, or 152. Additional upper division courses in Biology, Botany, or Zoology to make 24 units. *Related Fields*: high school or college chemistry; either high school physics with a grade of A or B or 6 units of college physics or Geology 1. *Foreign Language*: to be arranged according to the needs of the student.

1a, 1b. GENERAL BIOLOGY. *Mr. McCarthy, Mr. Phillips*. A general course designed primarily for those who do not intend to take further work in biology. It may be taken for credit by those who have high school biology, botany, or zoology. It will consider material, methods, and fundamental principles in the selected fields of biology considered most significant to every human being. Class, demonstration, and laboratory. Laboratory fee, \$6.00 each semester. 3 units. First semester class MW, 10 or 11; laboratory (select one from following): M, T, W, 1:15. Second semester, MWF, 10 or 11 must be kept open for class; either T or W, 1:15-4:00 must be kept open for laboratory.

105. BACTERIOLOGY. *Mr. Ryerson*. General study of important bacterial methods of culture and study, and their importance in disease and agriculture. Prerequisite: one year of biological work. Laboratory fee, \$8.00. Second semester. 4 units. Class, MW, 10; laboratory, MW, 2:15-4:10, and conference, F, 10.

112. GENETICS. *Mr. McCarthy*. This course considers modern developments in the study of heredity and evolution and their general application to plants and animal breeding and to eugenics and race questions. Prerequisite: one year of biological work. 3 units. Second semester. MWF, 10 or 11.

114. GERM CELLS AND INHERITANCE. *Mr. McCarthy*. A laboratory course involving a study of germ cells, giant chromosomes and experimental genetics illustrating the chromosomal basis of the transmission of hereditary factors. Prerequisite: Biology 112 (may be taken concurrently) and instructor's permission. Laboratory fee, \$5.00. Second semester. 1 unit. F, 1:15-4:10.

Botany

Although botany is a pure science, and the curriculum at Pomona is planned with this in mind, the subject offers excellent basic training for applied fields. Study of botany may serve as preparation for graduate study and eventually for teaching, research, or service with such federal, state, or county governmental agencies as the United States Bureau of Plant Industry, Forest Service including the Forest and Range Experiment Stations, National Park Service, Soil Conservation Service, Fish and Wild Life Service, state fish and game commissions, or agricultural inspection agencies.

Botany Concentration: LOWER DIVISION COURSES, Botany 12, 15 (4 units), Zoology 1 (or Biology 1a and a summer session at the Marine Laboratory). UPPER DIVISION COURSES, Biology 112; Botany 103, 105, 107, 123 or 158 and additional courses in botany (other than 181), selected to make a total of 24 to 36 units of upper division work. RELATED FIELDS, high school Chemistry or Chemistry 1 (students emphasizing plant physiology should have Chemistry 1, 59, and 106, and 110 is recommended); high school or college physics (Physics 1 or 51) or Geology 1. Prospective candidates for graduate work should consult the department concerning foreign language requirements.

Seniors with concentration programs in botany or in biology emphasizing botany are required to register for Botany NC 198, the Senior Seminar, and either (1) to present a satisfactory paper in this course and to pass an oral examination on the field of the paper, or (2) to pass the senior comprehensive examination.

All students concentrating in botany should consult Mr. Benson concerning plant collection built up in various courses. This is a graduation requirement, and the collection must be submitted for inspection at the time of the senior comprehensive examination. Credit for individual work on the collection may be had by registration in Botany 81.

Botany-Zoology Concentration: See Biology.

Botany-Chemistry Concentration: Botany 12, 15 (4 units), 17, 103; Chemistry 59; Physics 51. UPPER DIVISION COURSES, Botany 123, 158, and 105 or 107; Chemistry 106, 110, 111. Recommended electives from the following list: Biology 112; Botany 105 or 107, whichever was omitted above; Chemistry 18, 184, 187; Zoology 1, 60, 121, 123. Botany 12 and 15 or 17 and Chemistry 106 should be taken in the freshman year, and the full program should be planned as early as possible.

GENERAL BOTANY. Mr. Phillips and Mr. Vickery. An elementary course for those wishing general information concerning plants or foundation work in botany. Special attention is given to the plant as a living organism, and emphasis is upon structure and function in flowering plants. Laboratory fee \$5.00. 3 units. First semester. Class MW, 11 and arranged; laboratory, Section A, 1:15-3:05; Section B, Th, 1:15-3:05.

15. CLASSIFICATION AND FIELD BOTANY. *Mr. Benson.* An elementary course in classification of primarily the flowering plants; with much field work. No prerequisite, but permission of the instructor required. Laboratory and field trip fee \$8.75. 3 units (4 units for those undertaking additional field and laboratory study and making a plant collection.) Second semester. Class *MW*, 11; laboratory, Section A, *T*, 1:15-4:00, Section B, *Th*, 1:15-4:00.

17. SURVEY OF THE PLANT KINGDOM. *Mr. Phillips.* Relationships, life histories, and development of algae, fungi, liverworts, mosses, ferns, cone-bearing trees, and flowering plants. No prerequisite, but permission of the instructor required. Laboratory fee \$6.50. 3 units. First semester. Given in alternate years. Class, *TTh*, 8; laboratory *W*, 1:15-4:00. (Omitted in 1950-51.)

81. ELEMENTARY BOTANICAL PROBLEMS. *Staff.* This course offers to qualified students opportunities for additional supervised laboratory work in such fields as (a) classification of flowering plants, trees, or ferns, (b) structure and classification of algae, (c) culture and special physiology of plants of any group favorable for study, (d) structure and development of plants, or (e) ecology. Each semester. 1 or 2 units, but not more than 1 unit may be taken in the first enrollment for a problems course. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

103. PLANT PHYSIOLOGY AND ECOLOGY. *Mr. Phillips.* A study in the laboratory and greenhouse of physiological processes such as nutrition, absorption, conduction, transpiration, photosynthesis, respiration, and growth together with a study in the field of the factors affecting the living plant in its natural environment and those determining its geographical distribution and ecological relationships. Prerequisite, Botany 12 or the equivalent. Laboratory fee \$8.00 and breakage deposit \$5.00. First semester. 3 units. Class *MW*, 8; laboratory and field trips, *F*, 1:15-4:00.

105a, 105b. CLASSIFICATION OF FLOWERING PLANTS. *Mr. Benson and Mr. Vickery.* Study of the local native flowering plants and also of ferns and cone-bearing trees. Principles and methods of classification; evolutionary series; history of botanical classifications; geographical distribution of plants correlated with geological history. Field trips for study of plants in their natural habitats. Prerequisite, Botany 15. Laboratory and field trip fee \$8.75 each semester. 3 units. Given in alternate years. Class *MW*, 10; laboratory and field trips, *M*, 2:15-5:05.

107. STRUCTURE, DEVELOPMENT, AND RELATIONSHIPS OF GREEN PLANTS. *Mr. Benson.* A review of the structure, evolutionary series, and relationships of the groups of green plants. Prerequisite, Botany 12 and 17 or equivalent. Laboratory fee \$8.00. 4 units. Second semester. Given in alternate years. Class *MWF*, 10; laboratory *MW*, 2:15-4:05. (Omitted in 1950-51.)

123. PLANT PHYSIOLOGY. *Mr. Phillips.* A study of the physical and chemical processes occurring in plants. Prerequisite, Botany 12 and 103; elementary college chemistry; or permission of the instructor. Laboratory fee \$10.00 and

akage deposit \$5.00. 4 units. Second semester. Given in alternate years. Class *MWF*, 9; laboratory *F*, 1:15-4:00. (Omitted in 1950-51.)

. PLANT ECOLOGY. *Mr. Phillips*. Relationship of plants and animals to environment and to each other; plant communities factors affecting distribution of plants; plant geography and study of forests, deserts, tundra, sslands, woodlands, chaparral, etc. Prerequisites: Botany 12, 15, 103, and completion of or concurrent registration in Botany 105; or permission of instructor. Laboratory fee \$8.00 and breakage deposit \$5.00. 4 units. Second semester. Given in alternate years. Class *MWF*, 8; laboratory and field trips 1:15-4:00.

. PLANT ANATOMY. *Mr. Phillips*. A review of the structure of seed plants and preparation of microscope slides with practice on materials partly of the student's own choosing to represent structure or development of plants or for biological data. Prerequisites, Botany 12, 17, and 107; or permission of the instructor. Laboratory fee \$7.00 and the cost of special materials for the student's slide collection. First semester. 3 units. Class *TTh*, 8; laboratory 1:15-4:00.

. PRINCIPLES OF SYSTEMATIC BOTANY. *Mr. Benson*. Principles involved in organizing plant groups according to genetic relationships into families, genera, species, varieties, etc. Methods of exploration for data; classification of native populations, choice of scientific names, and description. Prerequisites, Botany 12, 15, and 105, or permission of instructor. Laboratory and field trip fee \$9.00. First semester. 3 units. Given in alternate years. Class and laboratory *MWF*, 10. Field trips arranged. (Omitted in 1950-51.)

. ADVANCED BOTANICAL PROBLEMS. *Staff*. Special individual work in any field of botany for students with adequate preparation. The student may participate preparation of a thesis for the Master's Degree by beginning a problem or continuing one begun in Botany 123, 158, 167, 175 or other courses, or he may work upon any significant problem approved by the instructor. Each semester. 1 to 3 units. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

198. Senior Seminar. *Staff*. Review and integration of various phases of botany and the biological sciences. Required of all seniors the year of graduation and of February graduates the preceding year. No credit arranged; meeting for one hour in alternate weeks. Second semester.

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Graduate work in botany is offered through the Claremont Graduate School. The facilities for research in plant classification are particularly good. The Pomona College Herbarium includes about 300,000 specimens and the library has been developed primarily for work in this field. For study of ecology, the vicinity of Claremont is exceptionally good, since alpine, desert, woodland, chaparral, grassland, ocean shore, and various desert floras are within easy reach. Research may be undertaken in systematic botany, plant physiology, ecology, or some phases of plant morphology.

Zoology

Three programs of concentration are offered: Zoology; Zoology-Chemistry and Zoology-Botany (Biology). Students interested in pre-medical training should consult the pre-medical course under Pre-professional Programs.

Zoology Concentration. Preparation for teaching (at junior college level), research, or government service. Students interested in any one of the above objectives should plan on at least one year of graduate study. Requirements: Zoology 1, 115, 120, 123, and 12 units of upper division courses chosen from Zoology 105, 106, 107, 109, 110, 111, 112, 113, 114, 116, 117, 118, 119, 121, 122, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Zoology-Chemistry Concentration. Preparation for positions allied to medicine, such as nursing, medical technology or research assistants. Training in zoology is recommended. Requirements: Zoology 1, 60, 121, 123; Chemistry 106 and one semester of 110 and 111; Physics 1 or 51; 8 units chosen from Zoology 105; Chemistry 107, 109; and Zoology 106, 107 and 126.

Zoology-Botany Concentration. Preparation for teaching at the high school level. For requirements consult program listed under Biology.

The Zoology Department is prepared to advise on a program which will permit junior transfer students to complete all requirements for the Bachelor of Science and Master of Arts degrees, and for the teaching credential in three and two summer sessions. Transfer students may be admitted to upper division courses without the specific prerequisites listed if in the opinion of the instructor they have had equivalent material elsewhere.

The Zoology Department of Pomona College in an arrangement with the California Institute of Technology offers summer work at the Kerckhoff Marine Laboratory at Corona del Mar. The 1950 session will run from August 7 to September 9 inclusive. Tuition for full registration (6 units) is \$70.00. Further information may be secured from the Department of Zoology.

1A-1B. GENERAL ZOOLOGY. *Mr. Pequegnat.* An introduction to all the principal fields of modern zoology for those desiring general information concerning animals, as well as for majors in the department. Reference is made to all classes of animals, but only those forms which best illustrate important zoological principles are studied intensively. No prerequisites. Laboratory fee \$6.00 each semester. 3 units. Class *TTh*, 10; laboratory *W* or *Th* or *F*, 1:15-4:05.

II. MARINE ZOOLOGY AND ECOLOGY. *Mr. Pequegnat.* An elementary course devoted to discussion of biological principles as observed in marine animals. In addition considerable attention is given to the evolutionary development of the various groups, as well as to their specific identification, their ecological distribution, and their habits. Lecture, laboratory, and field work. Designed especially to fulfill the Biological Science requirement. Offered at the Marine Laboratory. 6 units.

5 MAMMALIAN ANATOMY. *Mr. Ryerson*. A study of the principles and techniques of anatomy involving a consideration of the various anatomical relationships and trends displayed by mammals including man. Laboratory devoted principally to an intensive dissection of the cat. Prerequisite: one year of biology or zoology. Laboratory fee \$4.00. 3 units. First semester. Class *M*, 9; laboratory *TTh*, 1:15.

6 PARASITOLOGY. *Mr. Pequegnat*. An introduction to the general nature of parasitism, including a survey of all types of animal parasites in which use of greatest medical, economic, and social importance to man will receive major consideration. Prerequisite, any one of following: Zoology 1, 11, or Biology 1. 2 units. First semester. *TTh*, 9.

7 PARASITOLOGY LABORATORY. *Mr. Pequegnat*. Study both of prepared materials of significant parasites and their biological vectors, and of living parasites removed from invertebrate and vertebrate hosts. Some time will be devoted to slide preparation. Prerequisite: Zoology 106 (may be taken concurrently). 1 unit. First semester. *T*, 1:15.

8 COMPARATIVE VERTEBRATE ANATOMY. *Mr. Pequegnat*. A course embodying an analysis of the phylogenetic changes undergone by the principal organ-systems accounting for their present structure, and a comparative study of the structure of modern vertebrates. Laboratory devoted to dissections of non-mammalian vertebrates. Prerequisite: Zoology 60. Laboratory fee \$8.00. 3 units. Second semester. Class *TTh*, 9; laboratory *TTh*, 1:15.

9 COMPARATIVE VERTEBRATE EMBRYOLOGY. *Mr. McCarthy*. A study of development of representative vertebrates from fertilization through organogenesis. Prerequisite: Zoology 115. Laboratory fee \$8.00. First semester. 3 units. Class *TTh*, 8; laboratory *ThF*, 1:15.

10 MAMMALIAN PHYSIOLOGY. *Mr. Ryerson*. An introduction to the study of the functions of the organ-systems of mammals, with especial reference to man. Particular attention will be given to the elements of nutrition and to the integrative aspects of the endocrine and nervous systems. Prerequisite: Zoology 60. 3 units. First semester, *MWF*, 8.

11 LABORATORY METHODS IN PHYSIOLOGY. *Mr. Ryerson*. Special emphasis on the physiology of the vertebrates. Prerequisites: Zoology 121 (may be taken concurrently), and one year of chemistry. Laboratory fee \$6.00. First semester. 2 units. *MW*, 1:15.

12 HISTOLOGICAL TECHNIQUE. *Mr. Ryerson*. Theory and practice of preparation of vertebrate cells and tissues for microscopical study. Prerequisite: one year of biological science. May be repeated for credit. Laboratory fee \$4.00. 1 unit. Second semester. *F*, 1:15-4:05.

13 COMPARATIVE VERTEBRATE HISTOLOGY. *Mr. Ryerson*. The microscopical anatomy of representative vertebrates. Prerequisite: Zoology 125. Second semester. 3 units. Laboratory fee \$8.00. Class *TTh*, 8; laboratory *T*, 1:15.

128. ENTOMOLOGY. *Mr. McCarthy*. A general course in the structure, physiology, and classification of insects. Each student makes his own collection for identification and study. Prerequisite: Zoology 1a or its equivalent. Laboratory fee \$6.00. 3 units. Second semester. Class *T*, 1:15; laboratory *T*, 2:15; *Th*, 3:15.

130. MARINE INVERTEBRATES. *Mr. Pequegnat*. A study of invertebrates occurring in the sea from the points of view of their phylogenetic relationships, morphology, and their physiology. Lecture and laboratory. Laboratory devoted principally to Pacific Coast types. Offered at the Marine Laboratory. 3 units.

150. MARINE ECOLOGY. *Mr. Pequegnat*. A study of marine invertebrates as they exist in the field. Animals are observed and collected in the field and returned to the laboratory for specific identification and observation in living state. The lectures are devoted to discussion of the distribution of species observed and the factors which may account for these distribution patterns. The course is so organized that anyone registering for it should either have a thorough grounding in the morphology and physiology of marine invertebrates or take Zoology 130 concurrently. Offered at the Marine Laboratory. 3 units.

152a, 152b. ECOLOGY OF THE VERTEBRATES. *Mr. Pequegnat*. A study of land vertebrates, principally of this region, considering the bases of classification, life histories, adaptations to the environment, populations, and factors which account for their present distribution. First semester devoted principally to birds and mammals; second semester to amphibia and reptiles. 2 units each semester. Prerequisite: one year of biological work. Class *T*, 1:15; laboratory *W*, 1:15-4:05. (Omitted in 1950-51.)

160. ZOOLOGY PROSEMINAR. *Staff*. Discussion of selected topics of current interest to zoologists. Each semester. Open to all levels. No credit. *T*, 4:15-5:45.

199. INTRODUCTION TO RESEARCH IN ZOOLOGY. *Staff*. Open to those students concentrating in zoology or pre-medicine on consent of the staff. Each semester 1 to 3 units. May be repeated for credit. Laboratory fee \$2.00 per unit. Offered at Marine Laboratory as well as at Claremont. Arranged.

Chemistry

Concentration requirements are Chemistry 1, 59, 106, 107, 109, 110, 111, 158, 159; Physics 51; Mathematics 1, 65. Students who plan a professional career in the field are urged to follow the suggested program below, which is based upon the recommendations of the American Chemical Society Committee for Professional Training of Chemists. Pomona College has been placed upon the approved list by this committee.

Attention is called to the joint programs with the departments of Botany and Zoology, listed under the offerings of these departments.

Students who are preparing for secondary teaching of chemistry should

consult the department before registering for the junior and senior years. By proper coordination of courses it is possible to obtain both the Master's degree in Chemistry and the general secondary credential upon completion of graduate work for one academic year plus two summer sessions.

Properly qualified graduates of junior colleges can complete the Bachelor's and Master's degrees plus a credential in three years with two summer sessions. Those planning this three year program should consult the departmental chairman.

SUGGESTED PROGRAM FOR PRE-PROFESSIONAL STUDENTS

This schedule is intended as a guide only and deviations are made to suit individual cases. The electives should be planned to complete the distribution requirements of pages 71 and 72 as early as possible.

	1ST SEMESTER	2ND SEMESTER
Freshman Year		
Chemistry 1, 3	4 units	4 units
Mathematics 1	3 "	3 "
English 1	3 "	3 "
History 1	3 "	3 "
German 1	3 "	3 "
Sophomore Year		
Chemistry 59, 106	3 units	3 units
Chemistry 110, 111	4 "	4 "
Mathematics 65	3 "	3 "
Physics 51	4 "	4 "
Engineering drawing may be added if desired		
Junior Year		
Chemistry 158	3 "	3 "
Chemistry 107, 159	3 "	3 "
Electives	9 "	9 "
Senior Year		
Chemistry 112	1 "	1 "
Chemistry 109	1 "	— "
Chemistry 184	— "	3 "
Chemistry 185	2 "	— "
Chemistry 187	3 "	— "
Electives to complete program	9 "	12 "
Research is usually included		

Note: A fee is required for each laboratory course, to cover the cost of chemicals. In addition a locker deposit must be made to cover breakage and loss of equipment. The unused balance of the deposit is returned at the end of the year.

1b. INORGANIC AND ELEMENTARY THEORETICAL CHEMISTRY. Mr. Pierce. This is the basic course prerequisite for further work in the department. The laboratory work of Chemistry 3 must be taken concurrently. Prerequisite, ability to use logarithms and solve algebraic equations. 3 units. Lectures, 2S, 9.

3a, 3b. GENERAL CHEMISTRY LABORATORY. *Mr. Pierce and Staff.* Must be taken concurrently with Chemistry 1 since the experiments are correlated with and illustrate the lecture material. 1 unit. Fee, \$6.00 each term, deposit \$6.00 for the year. *Th* or *F*, 1:15-4:10. Concentrators in chemistry should register for the Thursday section, premedical students for Friday. Others may elect

59. QUALITATIVE ANALYSIS. *Mr. Smith.* The lectures deal with application of the principles of chemical equilibrium to the separations and identification of the common ions. Semimicro analytical procedures are employed. Prerequisite, Chemistry 1b with grade of C. 3 units. Fee \$6.00, deposit \$6.00. First semester. Lecture *W*, 10. Laboratory *M*, 2:15-5:10 and *T*, 1:15-4:10.

106. ELEMENTARY QUANTITATIVE ANALYSIS. *Mr. Pierce.* Prerequisite Chemistry 59 or equivalent (a thorough understanding of chemical equilibrium applied to ionization of weak electrolytes, hydrolysis, complex ions, etc.). 3 units. Fee \$8.00, deposit \$5.00. Second semester. Lecture *M*, 10. Laboratory *M*, 2:15-5:10 and *W*, 1:15-4:10.

107. ADVANCED QUANTITATIVE ANALYSIS. *Mr. Pierce.* Prerequisite, Chemistry 106 or equivalent. 3 units. Fee \$8.00, deposit \$5.00. First semester. Laboratory *M*, 2:15-5:10 and *TW*, 1:15-4:10.

109. THEORY OF QUANTITATIVE ANALYSIS. *Mr. Pierce.* Lectures and problem assignments on complex equilibria, oxidation potentials and more advanced theory of quantitative separations. Prerequisite, Chemistry 106 or equivalent. 1 unit. First semester. Lecture *W*, 9.

110a, 110b. ELEMENTARY ORGANIC CHEMISTRY. *Mr. Hansch.* The first semester is a survey of organic chemistry including aliphatic and aromatic chemistry. The second semester is a more detailed study of some of the more advanced organic reactions. Prerequisite, Chemistry 1 or equivalent. 3 units. Lectures *MWF*, 11.

111a, 111b. INTRODUCTION TO ORGANIC LABORATORY METHODS. *Mr. Hansch.* First semester, instruction in laboratory operations and organic preparation. Second semester, organic preparations and introduction to qualitative organic analysis. 1 unit. Fee \$6.00, deposit \$5.00 each semester. Laboratory *Th* only, first semester; second semester, *F* only, 1:15-4:15.

112a, 112b. ORGANIC SYNTHESIS. *Mr. Hansch.* Advanced preparations supplement the laboratory work of Chemistry 111. Open only to students taking the pre-professional program. 1 unit. Prerequisite, Chemistry 110, 111. Fee \$7.50, deposit \$5.00 each semester. Laboratory *Th*, 1:15-4:10.

158a, 158b. PHYSICAL CHEMISTRY. *Mr. Smith.* Prerequisite Chemistry 110, Physics 51, Mathematics 65. Chemistry 110 may be taken concurrently. 3 units. Lectures *TThS*, 10.

159. PHYSICAL CHEMISTRY LABORATORY. *Mr. Smith.* Prerequisite, Chemistry 158a. 3 units. Fee \$10.00, deposit \$5.00. Second semester. Laboratory *M*, 2:15-5:10 and *TW*, 1:15-4:10.

181b. CURRENT TOPICS IN CHEMISTRY. *Staff*. Oral reports by students and faculty on contemporary chemical research. Objectives are the training of students in the use of chemical literature and in the clear presentation of scientific results. Prerequisite, Chemistry 110, 158 (may be taken concurrently) and reading knowledge of German. 1 unit. Arranged.

1. ADVANCED ORGANIC CHEMISTRY. *Mr. Hansch*. A survey of current theories of organic reaction mechanisms. Prerequisite, Chemistry 110, 158a. 2 units. Second semester. Lectures *MWF*, 9.

2. ADVANCED INORGANIC CHEMISTRY. *Mr. Smith*. The lectures will include discussion of atomic and molecular structure as related to spectra, coordination compounds, and colloid chemistry. Prerequisite, Chemistry 107, 110, 158 (may be taken concurrently). 2 units. First semester. Lectures *MF*, 9.

3. QUALITATIVE ORGANIC ANALYSIS. *Mr. Hansch*. The use of systematic procedures for the identification of organic compounds. Prerequisite, Chemistry 106, 110, and reading knowledge of German. 3 units. Fee \$7.50, deposit \$5.00. First semester. Laboratory *W*, 1:15-4:10, plus two arranged periods.

192b. SPECTROCHEMICAL ANALYSIS. *Mr. Pierce*. Training in the operation of the spectrograph, use of excitation sources, qualitative analysis of a variety of samples, densitometry, preparation of working curves, and quantitative analysis. Each student is expected to prepare and test a working curve for a specific analysis. Assigned readings and frequent conferences in addition to laboratory work. Prerequisite, Chemistry 107, 158, and consent of instructor. Must be taken for a total of 6 units, but may be started either semester. 3 units. Fee \$10.00 plus cost of supplies (film and electrodes). Arranged.

4. UNDERGRADUATE RESEARCH. *Staff*. Seniors may take 6 units of research in Physical, Organic or Analytical Chemistry, under direction of a staff member. The work may be taken in one semester or extended over two. A thesis is required. Prerequisite, average of B in chemistry courses and consent of instructor. Fee \$3.00 per unit, deposit \$5.00. Each semester. Arranged.

171. GLASSBLOWING. *Mr. Smith*. Training is given in the fundamental operations involved in the construction of scientific glass apparatus (inner and outer joints, metal to glass seals, construction of mercury vapor pump and McLeod gauge). Academic credit toward graduation is not given for this course but the registrant receives a recorded grade indicating the proficiency attained. 2 units. Either semester. Fee \$7.50 plus cost of glass used. Laboratory arranged.

* * *

Graduate work leading to the M.A. degree is offered under auspices of the Claremont Graduate School. The Claremont catalog should be consulted for details.

Classics

In the interest of providing a maximum offering in Classics, a coordinating program is offered by the departments of Pomona and Scripps Colleges. A broad program is thereby assured to meet the needs of all students who desire training in Latin and Greek or in the literature of Classical Antiquity in translation. Mr. Carroll will gladly advise Pomona students regarding opportunities in this program, and will assist in developing programs of study which will meet basic requirements.

GREEK

51A-51B. **ELEMENTARY GREEK.** *Mr. Carroll.* A study of the principles of Greek grammar for beginning students. The course is designed to provide a firm foundation for the further study of the language and its literature. Simplified reading materials will be utilized as fully as possible. 3 units. *MWF, 8.*

101A, 101B. **INTERMEDIATE GREEK.** *Mr. Carroll.* For students who have had Greek 51A-51B or equivalent. A reading course in Greek with selections from the Apology of Socrates, Homer's Odyssey, Euripides' Medea, the Greek New Testament and Church Fathers. 3 units. Arranged.

GREEK AND ROMAN COMEDY AND SATIRE. A course designed to cover in English translation the dramas of Aristophanes, Menander, Plautus, and Terence and the literature of the outstanding Greek and Roman writers in the field of satire. Lectures will be given on the history of the development of the theatre, on the history of comedy and the mime, and on the development of satire and satiric forms. Year Course. Offered by Mr. Palmer at Scripps College. Students should enroll for Greek I-106. Arranged.

GREEK AND ROMAN TRAGEDY. Scripps College Course I-107. (Omitted 1950-51.)

160A, 160B. **CLASSICAL CIVILIZATION AND THE WESTERN HERITAGE.** *Mr. Carroll.* A course in general education for all students desiring orientation in the culture of the Graeco-Roman world and its legacy to modern civilization. No previous training is required in Classical languages or Ancient History. A broad program of lectures covering the salient phases of ancient life and art will be integrated with a reading program in translation of selected Classical authors from Homer to St. Augustine. An effort will be made to trace the principal intellectual currents of antiquity, down to and including Christianity, and to indicate their degrees of influence on modern art, literature and society. 3 units. *TThS, 9.*

LATIN

1A-1B. **ELEMENTARY LATIN.** Latin grammar and syntax for students without no secondary school Latin. The aims and purposes of individual students enrolled will be particularly considered by the instructor in this course. Its general goal is to develop an ability to read Latin as quickly as possible.

and to make use of that ability for a further understanding of the language. 3 units. In 1950-51 this course will be offered by Mr. Palmer at Scripps College. Students should enroll for Latin I-8. Arranged.

57b. INTERMEDIATE LATIN. *Mr. Carroll.* For students with one or two years of secondary school Latin, or Latin 1a-1b. Selected readings from Plautus, Cicero, Vergil, Ovid, St. Augustine, and the Vulgate Bible. Oral translation and discussions of grammar and syntax will be coordinated with lectures on the history of Latin literature. Emphasis will be on reading Latin as a living language. Attention will be given to the needs of the individual student in preparation of reading program. 3 units. Arranged.

ROMAN WRITERS OF THE REPUBLIC. *Staff.* A survey in Latin of the outstanding Roman writers in the second and first centuries B.C. An intensive study of a single author will be made during the second semester of the course. Open to all students who have had three years or more of secondary school Latin or the equivalent. Year course. Arranged.

ROMAN WRITERS OF THE EMPIRE. (Omitted in 1950-51.)

HISTORY OF GREECE. For description see History 101.

HISTORY OF ROME. For description see History 101.

ANCIENT ART AND ARCHAEOLOGY. For description see Art 55a, 55b.

Comparative Literature

Concentration in Continental Literature. Designed for students who are interested in European Literature.

Requirements: 24 units in courses numbered over 100. Twelve of these units must be in Continental Literature (in translation), twelve in European Literature in the original language. Electives in English literature are strongly recommended.

148a, 148b. READINGS IN CONTINENTAL LITERATURE IN TRANSLATION. *Mr. Humann.* A study of outstanding works of Cervantes, Molière, Goethe, Flaubert, Balzac, Tolstoy, Ibsen (for Juniors and Seniors only). 3 units. Arranged. (Omitted in 1950-51.)

148a, 148b. READINGS IN CONTINENTAL LITERATURE IN TRANSLATION. *Mr. Humann.* A study of outstanding works of Dante, Montaigne, Stendhal, Tolstoy, Dostoevsky, Thomas Mann, and others. Open to Seniors and to Juniors only if concentrating in Comparative Literature. 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

52. COMPARATIVE LITERATURE. *Mr. Merlan.* Year course. TTh, 3:15-5:00 and arranged hour.

Economics

A concentration program in Economics is suggested in general for those who wish to understand the nature and operation of the economic system in which they live and in particular for the student who contemplates a career in business, law, teaching, or research. Emphasis in the training is on sources of information and processes of analysis which are essential to leaders in the business and professional world.

Prerequisites: Lower division courses, Economics 5, 51, and 57. Economics 51, or equivalent, is a prerequisite for all advanced courses in economics.

Required courses: Economics 103, 104, 109, 110, 158, 190 and other courses in economics to bring the total of upper division courses to 24 units.

Recommended program: Economics 5 in the freshman year, Economics 51 and 57 in the sophomore year, Economics 103, 104, 109, 110 in the junior year, and Economics 190 and other courses in the field of the student's special interest during the senior year.

Pre-Professional programs: Students planning to take graduate work in business administration or law should include courses in English writing and literature, speech, psychology, and philosophy in addition to courses in government, history, and sociology. Courses in mathematics and in one or more foreign languages are strongly recommended particularly for those intending to take graduate work in economics in preparation for a career in teaching or research.

Junior Transfers: Transfer students should consult with some member of the Economics staff with a view to adjusting their programs so as to achieve a satisfactory concentration.

Three-Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three-year program enabling them to earn both the B.A. and M.A. degrees. The work for the Master's degree may be taken in economics, business & public administration, or in political economy.

In addition, the Claremont Summer Session, sponsored jointly by the four Associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them, within the three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

POLITICAL ECONOMY

Combined Year Course in American Politics and Economics

For the benefit of a limited number of students unable to include in their programs a full year each of economics and government, these two depart-

ments cooperate in offering the combined course described immediately below. It may be offered in fulfillment of one of the requirements for distribution in the lower division but not in combination with either Economics 51 or Government 51, which are the recommended courses.

a-1b. AMERICAN POLITICAL ECONOMY. *Departmental Staff in Economics and Government.* 1a, the American economic system, is devoted to a study of fundamental economic institutions, problems and processes, special attention being given to the factors which determine national income, employment and production. 1b, the American political system, is devoted to the study of basic political institutions, problems and processes, with emphasis upon the constitution, democracy, federalism, and the functions of legislation and administration. The two halves of the course may be taken in either order or concurrently, one section each of 1a and 1b being given each semester. Registration will be limited to approximately 30 per section.) 3 units. First semester: 1a, *TThS*, 10; 1b, *TThS*, 8. Second semester: 1a, *TThS*, 8; 1b, *TThS*, 10.

ECONOMICS

b, 5b. ACCOUNTING. *Mr. Oliver.* A study in theory and method, developing from the balance sheet the fundamental principles underlying alike the construction and interpretation of financial records. Open to freshmen. 3 units. Sections: *MW*, 8 and *MW*, 11. Laboratory, *W*, 1:15-4:15, or *F*, 1:15-4:15.

a-51b. PRINCIPLES OF ECONOMICS. *Staff.* The basic course in economics for both majors and non-majors. The nature and operation of the American economic system and its place in the world economy. Includes current economic problems and related public policies. Not open to freshmen. 3 units. *WF*, 9 and 11; *TThS*, 8 and 10.

c. STATISTICS FOR THE SOCIAL SCIENCES. *Mr. Break.* A course in the application of quantitative method to economic and social problems with emphasis on the interpretation of the results obtained. Frequency series analysis, elementary sampling, and simple correlation. (Credit will not be given for both Economics 57 and Psychology 102.) 3 units. First semester. *TThS*, 9. Laboratory, *T*, 2:15-4:15 or *Th*, 2:15-4:15.

ADVANCED COURSES

Economics 51 or equivalent is prerequisite for all advanced courses in economics.

3. MONEY AND BANKING. *Mr. Bond.* Principles of money, credit, and banking interpreted in the light of the institutions and financial organization designed to supply society with adequate media of exchange. The relation of money, income, and prices, and the problems of monetary management and fiscal policy. 3 units. First semester. *TThS*, 10.

104. ECONOMIC THEORY AND BUSINESS POLICY. *Mr. Bond.* A study of the organization of economic activity through markets and prices with emphasis on the analytical method in economics; resource use and income division in markets containing various mixtures of competition and monopoly; the relationship between economic analysis and business practice. 3 units. First semester. *MWF, 10.*

105. CORPORATION FINANCE. Principles underlying the promotion, financial structure and control, failure, and reorganization of corporate enterprises. Prerequisite: Economics 5, or equivalent training in accounting. 3 units. First semester. (Omitted in 1950-51.)

109. PUBLIC FINANCE. *Mr. Break.* A study of government taxing and spending policies and of their effect on the volume of production and employment, the price level, and the distribution of income. Special attention is given to the problem of the public debt and to proposals for tax reform. 3 units. Second semester. *TThS, 10.*

110. INDUSTRIAL ORGANIZATION AND PUBLIC POLICY. *Mr. Bond.* A study of the basic American policy of maintaining competition to control economic behavior with some consideration of agricultural policy, utility regulation and other forms of industrial control. Case studies of specific firms and industries and the work of the Antitrust Division and Federal Trade Commission are emphasized. 3 units. Second semester. *MWF, 10.*

111. LABOR ECONOMICS. *Mr. Perry.* An examination of the tools of economic analysis in their relation to problems of labor. A brief history of organized labor is followed by an analysis of such problems as labor productivity, minimum wage legislation, maintenance of full employment, and union wage and hour policies. Economics 104 or equivalent is desirable but not required as a prerequisite. 3 units. Second semester. *MWF, 9.*

118a, 118b. DEVELOPMENT OF ECONOMIC INSTITUTIONS. A study of the basic economic forces and institutions of Europe and the United States since 1500. Emphasis will be placed on those factors contributing most to the establishment of the present-day economies of the two areas. 3 units. (Omitted in 1950-51.)

150a-150b. ADVANCED ACCOUNTING. *Mr. Darlington.* Advanced accounting theory and practice applied to the managerial problems of valuation and operation in various types of business concerns. Accounting for the organization and liquidation of co-partnerships and corporations, for combinations and consolidations, for trusts, estates, receiverships, and branches. 3 units. Prerequisite: Economics 5 or equivalent. *MWF, 8.*

154. INTERREGIONAL TRADE. *Mr. Oliver.* A study of trade principles, problems, and policies. Topics include the balance of payments and the processes of its equilibrium, international commercial policies and trade

agreements, the international monetary fund and the world bank, and the problem of world reconstruction. 3 units. Second semester. *TThS*, 9.

158. INTERMEDIATE STATISTICS. *Mr. Break*. More advanced work in frequency series analysis and in sampling theory, analysis of variance, decomposition of economic time series, construction and interpretation of index numbers, and business forecasting. 3 units. Second semester. *TThS*, 9 and *Th*, 2:15-4:15.

190. HISTORY OF ECONOMIC THOUGHT. *Mr. Perry*. A survey of the development of economic science and policy from the forerunners of the classical school to the present date with emphasis on those aspects of economic doctrine which contribute most to an understanding of the present status of the field of economics. 3 units. First semester. *MWF*, 9.

191. MONETARY THEORY. *Mr. Bond*. A systematic study of the theoretical tools of analysis used in consideration of the economic system as a whole. Emphasis is placed upon monetary and general equilibrium theory. Prerequisite: Economics 104 and permission of instructor. 3 units. Second semester. Arranged.

192. BUSINESS CYCLES. *Mr. Oliver*. An introduction to the general problem of economic change; the history, theory, and measurement of business cycles together with study of theories of cyclical stabilization. 3 units. First semester. *TThS*, 9.

198. INTRODUCTION TO RESEARCH. *Mr. Perry*. Supervised advanced study in any field of economics. Each student will pursue an individual research project which will provide the basis for oral reports, group discussion, and a final written research report. Open to qualified seniors with the permission of instructor. 3 units. First semester. *Th*, 7:30-10 p.m.

199. READINGS IN ECONOMICS. *Mr. Bond*. Senior seminar devoted to the study of current economic problems and policies with emphasis on sources of information and the use of tools acquired in earlier courses. Selected readings, oral reports, written exercises. Open to qualified seniors with permission of instructor. 3 units. Second semester. *Th*, 7:30-10 p.m.

BUSINESS LAW. For description, see Government 106.

ADMINISTRATIVE LAW. For description, see Government 156.

INDUSTRIAL PSYCHOLOGY. For description, see Psychology 55.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

MARKETING. *Mr. Henniger*. 3 units. Both semesters. *MWF*, 9.

FOREIGN TRADE. *Mr. DeHaas*. 3 units. Second semester. *MWF*, 8 or 9.

PERSONNEL ADMINISTRATION. *Mr. Phelps*. 3 units. Second semester. *TThS*,
CORPORATION FINANCE. *Mr. Taylor*. 3 units. Both semesters. *TThS*, 9.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

Open to qualified seniors with the permission of the chairman of the department and the instructor of the graduate seminar. For other graduate courses, consult the catalog of The Claremont Graduate School.

205. PRICE THEORY. *Mr. Vandermeulen*. 4 units. First semester. Arranged

206. MONETARY THEORY AND POLICY. *Mr. Bond*. 4 units. Second semester. Arranged.

Education

The courses in Education in Pomona College are designed to supply the general background that an intelligent citizen should have regarding one of our important social institutions and at the same time to prepare a prospective teacher or administrator for the more technical training given in the Claremont Graduate School or in some other graduate institution.

Requirements for concentration in Education which apply to student graduating prior to June 1952: 24 units of work in courses numbered over 100, at least 12 of which are in the department of education.

Prerequisite courses: Education 53a, 53b. *Required courses:* Education 104, 105, 151, 187, Psychology 107 or 108 (or equivalent course at Scripps College). Selections from the following to bring total to at least 24 units: Psychology 103, 135, 156 (or equivalent course at Scripps College), 158; Scripps IV-112, IV-114; Physical Education 123, 124, 126; Sociology 106, 152. In addition, the following teacher-education courses are available as a part of a program of concentration in the departments named or may be used as electives in the major field of education: Physical Education 119, 154, 191.

Requirements for concentration in Education which apply to student graduating in June 1952 or thereafter: 24 units of work in courses numbered over 100, as prescribed below:

Prerequisite courses: Education 53a, 53b; Psychology 51a-b; Government 51a-b; Sociology 51. *Required courses:* Education 104, 105, 151, 187; Sociology 106; Psychology 107, 108 (or equivalent course at Scripps College); Government 103 or 110.

53a, 53b. INTRODUCTION TO EDUCATION. *Mr. Lee*. The basic course in Education, designed for those who desire an understanding of the place and function of education in America today. An introductory study of the

educational programs and processes in a democracy and the fundamental responsibility of the citizen for their effective operation. Required of all students concentrating in education. While the listed order is preferable, the two halves of the course may be taken in either order. 3 units. Two sections, *MWF*, 8, 9.

104. HISTORY OF EDUCATION: EUROPEAN AND COMPARATIVE. *Mr. Lee*. A course designed to study and appraise the European roots of contemporary American educational traditions and practices, with some attention to the contemporary educational policies and practices in foreign countries. History 1 and 55 or equivalent and Education 53 recommended as preparation. 3 units. First semester. *MWF*, 11. (Offered in alternate years; to be omitted in 1950-51.)

105. HISTORY OF EDUCATION: UNITED STATES. *Mr. Lee*. A course designed to study the growth and evolution of education in the United States. Stress placed upon the intellectual, social, and economic forces which shaped educational developments. History 1 and 55 or equivalent and Education 53 and 104 recommended as preparation. 3 units. Second semester. *MWF*, 11. (Offered in alternate years; to be omitted in 1950-51.)

106. INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. *Mr. Lee*. A study of the major philosophical foundations of contemporary American education. Both the contributions of historical philosophies and contemporary developments in educational thought will be examined. An attempt to answer the question: What kind of education for modern America? 3 units. First semester. *MWF*, 11. (Offered in alternate years; to be omitted in 1951-52.)

107. FUNDAMENTAL ISSUES IN CONTEMPORARY AMERICAN EDUCATION. *Mr. Lee*. A course designed as an introduction for all students to the major issues confronting American education today. The course will consider such problems as: the content of the curriculum, religion and public education, academic freedom, and federal aid to education. 3 units. Second semester. *MWF*, 11. (Offered in alternate years; to be omitted in 1951-52.)

108. THE TEACHING OF MATHEMATICS. For description see Mathematics 228.

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A wide range of graduate work in Education leading to the various credentials as well as to the degree of Master of Arts is offered under the auspices of the Claremont Graduate School.

English

English 1 or its equivalent is prerequisite for all other departmental courses. English 50 and History 1 are required of all students intending to concentrate in the Department of English.

A reading knowledge of at least one language and literature other than English, as well as high school preparation in Latin, is strongly recommended. In most graduate schools, candidates for the degree of Doctor of Philosophy are required to have a reading knowledge of *two* foreign languages.

Electives should be chosen, in consultation with the adviser, from courses in Speech and Dramatics, foreign literature, the history of England, the history of philosophy, and (especially for students interested in writing) elementary applied art.

Transfer students may offer equivalent courses pursued at other colleges in fulfillment of these requirements and recommendations.

CONCENTRATION WITH EMPHASIS ON LITERATURE

Students who are concentrating in literature must choose from each of the four groups below at least the number of units specified:

Group I (9 units): ENGLISH 101 *or* 155 *or* 153 *or* 154.

Group II (6 units): ENGLISH 103 *or* 105.

Group III (6 units): ENGLISH 104 *or* 192 *or* 193.

Group IV (6 units): ENGLISH 194 *or* 195a (3 units); 195b (3 units).

A brief reading list, designed to acquaint students with the major figures in literature, will supplement course assignments in the program of concentration. All of the books on this list, many of which will already have been read in course, will be included in the comprehensive examination.

CONCENTRATION WITH EMPHASIS ON WRITING

The following pattern of courses must be completed, for a total of at least 27 units, by students concentrating in writing:

1. Upper-division courses in composition (111, 151; Speech and Dramatics 112): 6 to 12 units. Note that certain courses in composition may be repeated for credit under proper conditions.

2. Courses in literature listed in Groups I and II above: 9 to 12 units.

3. Courses in literature listed in Groups III and IV above; 9 to 12 units.

A course in elementary applied art, taken in the Freshman or Sophomore year, is strongly recommended to students who intend to concentrate with an emphasis on writing.

A list of readings, stressing the principles of literary criticism and illustrating the theory and techniques of writing, will supplement regular course work in this program of concentration.

Information concerning Honors programs and projected graduate work in English may be had from the Departmental Staff.

1b. ENGLISH: AN INTRODUCTORY COURSE. *Departmental Staff*. A brief review of the fundamentals of composition; instruction and practice in writing; reading and study of a few important literary types. Normally prerequisite for all other departmental courses. 3 units. Section meetings M, F, 8; TThS, 8; MWF, 9. Section of 1b first semester for specially qualified students TThS, 10.

50b. GREAT ENGLISH AUTHORS. *Mr. Ilyin, Mr. Weismiller, Mrs. Pahl*. Study of selected works of poetry and prose as representative major contributions to the literature of our cultural heritage. First semester: Chaucer, Spenser, Milton; also readings from the King James version of the Bible and the English lyric as a literary type. Second semester: Swift, Pope, Wordsworth, Carlyle, Arnold, Yeats, Eliot. No student will be admitted to second semester of the course who has not completed English 50a or an equivalent. 3 units. MWF, 11; TThS, 10.

INTRODUCTION TO POETRY. *Mr. Holmes*. A study of the principal aims and techniques of poetry. Readings in a wide variety of poetic types. 3 units. First semester. TThS, 10.

INTRODUCTION TO DRAMA. *Mr. Davis*. Great plays of various periods from the classic Greek to the present day; as extensive reading as time will permit. 3 units. First semester. MWF, 10.

INTRODUCTION TO PROSE FICTION. *Mr. Angell, Mr. Beatty*. A general survey of important works in prose fiction with emphasis upon selected English, American, and continental—from the eighteenth century to the present. Included in the course are works of Fielding, Austen, Flaubert, Dickens, Trollope, and Thackeray. 3 units. Second semester. MWF, 10; TThS, 10.

NEWS WRITING. *Mr. Callander*. Survey course in writing and presentation of news, with special attention to writing for trade papers, professional journals, and institutional news bureaus. Enrollment limited to 30 students. First semester. MWF, 11.

EXPOSITORY WRITING. *Mr. Mulhauser*. A course in the principal methods and techniques in explaining processes, theories, and the results of special investigations. This course is designed to meet the needs of the student who wishes further practice in expository writing, especially the student who is preparing for a career in business or one of the professions, such as law, medicine, or scientific research. Enrollment limited to 25 students. 3 units. Second semester. MWF, 11.

NARRATIVE AND DESCRIPTIVE WRITING. *Mr. Weismiller, Mr. Ilyin*. A course for students who, having shown some ability as writers in English 1 or equivalent, wish to continue with the basic creative problems of narrative and description. Laboratory exercises, assigned problems, and discussion. Prerequisite: permission of the instructor. Enrollment limited to 25 students. 3 units. Second semester. Two sections. MWF, 11; TThS, 10.

ADVANCED COURSES

English 1 or an equivalent is prerequisite for all advanced course English.

101a, 101b. THE RENAISSANCE IN ENGLAND. *Mr. Strathmann*. English literature of the Renaissance, chiefly non-dramatic, with emphasis upon Renaissance thought and the development of English literary forms. In the first semester the principal writer studied is Spenser; in the second semester, Milton. 3 units. *MWF, 9.*

103a, 103b. LITERATURE OF THE EIGHTEENTH CENTURY. *Mrs. Pahl, Davis*. A survey of English literature from 1660 to 1800. Main topics: first semester, Restoration drama, neo-classic literary theory, the works of Dryden, Swift, and Pope; second semester, the beginnings of the novel, pre-Romantic poetry, Dr. Johnson and his circle. 3 units. *MWF, 10.*

104a, 104b. LITERATURE OF THE NINETEENTH CENTURY. *Mr. Angell, Mulhauser*. An intensive study of the major poets and prose-writers of the period, with emphasis on literature as (1) an artistic expression of the emotions, and ideas of the individual writer, and as (2) a reflection of the important, intellectual, historical, and literary movements of the century. First semester, writers of the Romantic period; second semester, writers of the Victorian period. 3 units. *TThS, 9.*

105a, 105b. AMERICAN LITERATURE. *Mrs. Pahl, Mr. Holmes*. The literature of the United States, from the colonial period to the twentieth century, with emphasis upon the development of a national culture. Representative writers studied are, in the first semester, Edwards, Irving, Cooper, Emerson, Thoreau, and Hawthorne; in the second semester, Poe, Melville, Whitman, Mark Twain, Henry James, and Dreiser. 3 units. *TThS, 10.*

111. THE SHORT STORY. *Mr. Mulhauser*. Practice in the writing of short stories and sketches. Consideration of the critical principles of the short story and criticism of both student and professional work. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students; if the registration for the course exceeds that number, the selection of the students to take the course will be made after the first class meeting. 3 units. First semester. *T, 1:15-3:05, and F, 1:15.*

151. CREATIVE WRITING. *Mr. Weismiller*. Supervised practice in all forms of creative writing. Study of matters and fields of literary interest. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students; if the registration for the course exceeds that number, the selection of the students to take the course will be made after the first class meeting. 3 units. Second semester. *T, 1:15-3:05, and F, 1:15.*

3. CHAUCER. *Mr. Davis*. A study of Chaucer as the outstanding narrative and dramatic poet of the transition from the medieval to the modern world. 3 units. First semester. *MWF*, 9.

4. THE ENGLISH LANGUAGE. *Mr. Bracher*. A survey of the English language from its origins to the present. Principles of linguistic change, as an aid to understanding of modern English usage. Especially recommended to prospective teachers. 3 units. Second semester. *MWF*, 11. (Omitted in 1950-51)

5a, 195b. SHAKESPEARE. *Mr. Strathmann*. A study of the principal plays and of Shakespeare's career as a dramatist, with attention to the working conditions of the Elizabethan stage and collateral reading in dramatists contemporary with Shakespeare. First semester, mainly comedies and histories; second semester, mainly tragedies. 3 units. *MWF*, 11.

6. CONTEMPORARY NOVELISTS. *Mr. Mulhauser*. A survey of English and American novelists from Henry James to the present day. Lectures and discussion of texts. 3 units. First semester. *MWF*, 10.

7. CONTEMPORARY POETS. *Mr. Weismiller*. Poets of the twentieth century, from Ward Manley Hopkins to the present, studied in the light of the great poetic tradition. 3 units. Second semester. *MWF*, 10.

8. LITERARY CRITICISM. *Mr. Angell*. A study of the principles of literary criticism. Selected readings in the masterpieces of criticism from ancient times to the present, with emphasis on the theories and forms of poetry, fiction, and drama. 3 units. First semester. *MTh*, 2:15-3:30.

9a, 195b. READINGS IN ENGLISH LITERATURE. *Mr. Holmes, Mr. Angell*. A seminar open to seniors concentrating in English. First semester: methods of literary study illustrated by a reading of the works of seventeenth century poets. Second semester: lectures, readings, and reports directed toward a thesis, on the student's part, of his work in English. 3 units. *WF*, 2:15-3:30.

10. CHARACTER PRESENTATION IN DRAMATIC LITERATURE. For description see Speech and Dramatics 61a, 61b.

11. WRITING. For description see Speech and Dramatics 112a-112b.

AVAILABLE AT SCRIPPS COLLEGE

12. LITERATURE OF THE ENGLISH RENAISSANCE. *Mr. Hard*. Year course. *WF*, 10. Credit will not be given for both I-59 and 101a.

13. SHAKESPEAREAN TRAGEDY. *Mr. Dunn*. Year course. *MWF*, 11. Credit will not be given for both I-116 and 155b.

14. ADVANCED WRITING. *Mr. Armour*. Registration limited. Year course. *Th*, 10 and arranged.

15. AMERICAN SOCIAL LITERATURE. *Mr. Foster*. Year course. *MWF*, 11.

I-144. THE ROMANTIC POETS. *Mr. Armour*. Year course. MWF, 8. Credit not be given for I-144 and 104a.

I-145. MILTON. *Mr. Dunn*. Year course. MWF, 10.

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The opportunity for graduate work in English provided in the Claremont Graduate School is quite extensive. The student who purposes to go on in graduate study is advised to plan his whole course from at least as early as his junior undergraduate year.

Geography

AVAILABLE AT SCRIPPS COLLEGE

V-103. THE NATURAL SETTING OF THE SOUTHWEST. *Miss Smith*. First semester. (Continuation in second semester by permission only.) Arranged hours.

Geology

Geology 1 is an introductory survey course. It is designed to give a general appreciation of the features and processes at the earth's surface to the non-technical student and is a prerequisite for most of the more advanced work in the department. The other courses are designed for persons intending to specialize in geology or a related science.

A student concentrating in geology should include courses 1, 2, 59, 107, 110, 112, 181, 182, an approved summer field course, and either 107 or 110. Required in other departments: Mathematics 1, 65; Physics 51; Chemistry 101 and a reading knowledge of German, Spanish or French (German preferred). Geology 161 and Pre-Engineering 7 and 40 are very desirable. In exceptional cases courses in biology may be substituted for those in physics and chemistry. Rarely the requirement of a summer field course is waived.

Seniors graduating in geology must write an acceptable thesis based on work done in Geology 181, 182, and take a 2 or 3 hour written examination on the fundamentals of geology, followed by a brief oral examination on topics suggested by the thesis or the examination paper.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 102; Geology 59, 110, and 112, plus 11 additional upper-division units totaling a minimum of 24, selected from Astronomy 151 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 161. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

1a-1b. INTRODUCTION TO GEOLOGY. *Mr. Lounsbury*. A survey of geological processes and earth history. 3 units. MWF, 10. Laboratory or field work. W or Th, 1:15-4:05.

2a-2b. LABORATORY AND FIELD TRIPS SUPPLEMENTING GEOLOGY 1a-1b. *Staff*. Open to students who are taking or have taken Geology 1 or its equivalent.

Prerequisite for all more advanced courses in geology except 59. Fee \$3.00 each semester. 1 unit. *W* or *Th*, 1:15-4:05.

3. MINERALOGY, INCLUDING CRYSTALLOGRAPHY. *Mr. Woodford*. Prerequisite, high school chemistry or equivalent. Two class and two laboratory periods. Laboratory fee \$4.00. 4 units. First semester. Class *WF*, 11; laboratory, and *F*, 1:15-4:05.

2. ELEMENTARY FIELD GEOLOGY. *Mr. Lounsbury*. Field methods; geologic mapping; spring recess trip; writing of geologic reports. Prerequisite: Geology 10, completed or in progress. Desirable, Geology 112. Second semester. 3 units. Arranged.

4. FIELD GEOLOGY. *Mr. Shelton*. A summer field course in geologic mapping. 8 units. Prerequisite: Geology 110, and in 1951 and later years, Geology 102.

107a-107b. INVERTEBRATE PALEONTOLOGY. *Mr. Woodford*. Prerequisite, Geology 1 and 2. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$6.00 each semester. 3 units. Arranged.

5. PETROLOGY. *Mr. Woodford*. The study of rocks without the aid of a polarizing microscope. Prerequisite: Geology 1, 2 and 59. Second semester. Two class and two laboratory periods. 4 units. Laboratory fee \$4.00. *WF*, 11, laboratory, *T* and *F*, 1:15-4:05.

6. STRUCTURAL GEOLOGY. *Mr. Shelton*. Structural features of sedimentary, igneous and metamorphic rocks; deformation of the earth's crust; practice in laboratory methods for dealing with geological problems in three dimensions. Prerequisite: Geology 110. First semester. Two class and one laboratory periods. 3 units. Laboratory fee \$4.00. Arranged.

151a-151b. PETROGRAPHY. *Mr. Shelton* and *Mr. Lounsbury*. The optical properties of crystals; study of minerals and rocks with the petrographic microscope. Prerequisite: Geology 110. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$5.00 first semester; \$8.00 second semester. 3 units. Arranged.

161a, 161b. ADVANCED GENERAL GEOLOGY. *Mr. Shelton*. History of geology, weathering, sedimentary rocks, geomorphology, geologic time, volcanology, glacial deposits. Prerequisites: Geology 110, one year of college mathematics, college physics and chemistry of high school or college grade. Three class periods, or two classes and one laboratory each week. 3 units. Arranged. Second semester of this course will be omitted in 1950-51.)

182. GEOLOGICAL INVESTIGATION AND RESEARCH. *Staff*. 3 units. Laboratory fee \$4.00 each semester. Arranged.

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Graduate work in Geology with special reference to Petrography is offered under the auspices of the Claremont Graduate School.

German

A program of concentration in German consists of a minimum of 18 units, courses numbered above 100 and 6 additional units in German or in a related field selected according to the student's needs and interests. Special programs for students interested in German Literature, translation, library work, post graduate work in German can be had from the department.

1a-1b. **ELEMENTARY GERMAN.** *Miss Wagner.* The acquirement of a smattering working vocabulary. Constant ear-training, and as much practice in speaking as time permits. Daily exercises in reading and writing. The essentials of grammar. Etymology. Comment on German life. 3 units. *MWF, 9, TThS,*

53a-53b. **ADVANCED GERMAN.** *Mr. Baumann.* More advanced German language study through intensive reading of selected German works, with collateral reading in the field of the student's individual interest—literary, social, or scientific. Continued practice in German conversation. Special attention to an understanding of the cultural life of Germany, Austria, and Switzerland. Prerequisite, German 1 or an equivalent. 3 units. *TThS,*

102a, 102b. **ADVANCED CONVERSATION, READINGS AND TRANSLATION.** *Miss Wagner.* Intensive critical readings of masterpieces of the eighteenth and nineteenth centuries. Drill in written and oral expression. This course is also designed for those interested in translating and summarizing in English reports given in German. Prerequisites, German 53 or equivalent. 3 units. *TThS, 10.*

109a, 109b. **GERMAN LITERATURE OF THE NINETEENTH CENTURY.** *Miss Wagner.* With special reference to the cultural, economic and political history of Germany. Discussion and papers. Prerequisite, German 53 or equivalent. 3 units. *MWF, 10.*

113a, 113b. **GERMAN CLASSICS OF THE EIGHTEENTH CENTURY.** *Mr. Baumann.* A study of the outstanding works and personalities of the period with particular attention to the social and political life of Germany. Prerequisite, German 53 or equivalent. 3 units. *MWF, 10.* (Omitted in 1950-51.)

158a, 158b. **MODERN GERMAN LITERATURE.** *Mr. Baumann.* The development of German Literature from 1880 to the present with reference to the political and social changes during that period. 3 units. Arranged.

160a, 160b. **SURVEY OF GERMAN LITERATURE.** *Mr. Baumann.* The development of German Literature from earliest times to the present. 3 units. *TThS, 9.* (Omitted in 1950-51.)

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Under the auspices of the Claremont Graduate School graduate work is offered in various phases of German Literature with special emphasis on the modern field.

Government

In addition to preparation for more effective citizenship, concentration in Government is suggested for students planning careers in law, teaching, research, public relations, civil service or the foreign service. The department will gladly advise students regarding opportunities in these fields and will assist in developing programs of study designed to meet basic requirements. *General Requirement:* Government 51, or its equivalent, is a prerequisite for all other courses in the Department.

Lower Division Prerequisites for Concentration: The following courses must be completed by the end of Sophomore year: History 1; Government 51; Economics 51. The introductory courses in Sociology, Accounting and Statistics are strongly recommended.

Program of Concentration: A minimum of 24 upper division units in Government, including in each case Government 104, 125, 154, 157, 182, 183, and 6 upper division units from one of these fields: Economics, History, Sociology. These combinations are especially recommended: in Economics 104 and 109 or 104 and 110; in History 107a, b, 113a, b; Sociology 102 and 103. Each student's program shall be arranged in consultation with the departmental staff. A reading and speaking knowledge of at least one modern foreign language is strongly advised, particularly for students having any intention whatever of seeking positions in foreign service or foreign trade.

Junior Transfers: Students transferring to Pomona at the beginning of the Junior year are eligible to concentrate in Government, provided the prerequisites are met before entrance or can be met during the Junior year.

Three Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three-year program enabling them to earn both the B.A. and M.A. degrees. In addition, the Claremont Summer Session, sponsored jointly by the four associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them, within the three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department. The schedule of work for the M.A. degree envisages a combination of courses and seminars and falls, within the Claremont Graduate School, under the jurisdiction of the Committee on Political Economy.

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POLITICAL ECONOMY

Combined Year Course In

American Politics and Economics

For the benefit of a limited number of students unable to include in their programs a full year each of economics and government, these two Depart-

ments cooperate in offering the combined course described immediately below. It may be offered in fulfillment of one of the requirements for distribution in the lower division but not in combination with either Economics 51 or Government 51, which are the recommended courses.

1a-1b. AMERICAN POLITICAL ECONOMY. *Departmental Staff in Economics and Government.* 1a, the American Economic System, is devoted to a study of fundamental economic institutions, problems and processes, special attention being given to the factors which determine national income, employment and production. 1b, the American Political System, is devoted to the study of basic political institutions, problems and processes, with emphasis upon the Constitution, democracy, federalism, and the functions of legislation and administration. The two halves of the course may be taken in either order or concurrently, one section each of 1a (identical with Economics 51a) and 1b (identical with Government 51b) being given each semester. 3 units. First semester: 1a, *TThS*, 10; 1b, *TThS*, 8. Second semester: 1a, *TThS*, 1b, *TThS*, 10.

GOVERNMENT

51a-51b. ESSENTIALS OF GOVERNMENT. *Staff.* The foundation course in government, embracing in the first half a survey of principles, processes and institutions of universal significance in politics and, in the second, a study of the United States Government based on the conceptual insights thus developed. Required of all students concentrating in government or international relations. 3 units. *MWF*, 8, 11; *TThS*, 9.

101. AMERICAN POLITICAL IDEAS. *Mr. Lee.* The growth of political and legal ideas in America from colonial times to the present, with emphasis upon theories regarding the foundations, structure, and scope of government. 3 units. Second semester. *TThS*, 8.

103. STATE AND LOCAL GOVERNMENT. *Mr. Vieg.* An examination of trends and problems, both political and administrative, in state and local government, with particular reference to California. Special attention given to the needs of students interested in education and municipal management. 3 units. First semester. *MWF*, 2:15.

104. PRINCIPLES OF ADMINISTRATION. *Mr. Vieg.* A study of the forms and modes of responsible administration in American government including the theory and practice of organization, fiscal and personnel management, measurement of administrative efficiency, public relations and comparison with business management. 3 units. Second semester. *MWF*, 9.

105. INTRODUCTION TO LAW. *Mr. Lee.* The nature of law, public and private theories of jurisprudence; comparative legal institutions with emphasis upon Anglo-American common law and equity; the citizen's legal rights and liabilities; judicial systems. 3 units. First semester. *TThS*, 8.

6. BUSINESS LAW. *Mr. Darby*. A survey of the law of contracts, agency, leases, negotiable instruments and other matters normally arising in the course of business. 3 units. Second semester. *TThS*, 8.
7. PROBLEMS IN ADMINISTRATION. *Mr. Vieg*. Intensive study of selected problems in local, state, national or international administration. An advanced course designed primarily for students preparing for government service or for graduate work in public administration. 3 units. (Omitted in 1950-51.)
8. MODERN DEMOCRACIES. *Mr. Wolfe*. A comparative study of political institutions in contemporary democratic states, including Great Britain, Canada, France, Switzerland, and one of the Scandinavian countries. 3 units. First semester. *TThS*, 10.
9. SOVIET IDEOLOGY AND INSTITUTIONS. *Mr. Wolfe*. An analysis of the assumptions, institutions and processes of Soviet life and a study of the evolution of Soviet politics, economics, and diplomacy from 1917 to the present. 3 units. Second semester. *TThS*, 10.
10. AMERICAN CONSTITUTIONAL LAW. *Mr. Darby*. An analytical and historical examination of the nature and extent of constitutional power in the United States. The separation of powers doctrine; federal-state relations; the powers of Congress and the President; constitutional guarantees of the rights of individuals; suffrage, citizenship, and the civil liberties—religion, speech and press. Principal emphasis will be placed on Supreme Court cases. 3 units. First semester. *TThS*, 9.
11. ADMINISTRATIVE LAW. *Mr. Darby*. The law of public power in the United States; the character and limits of executive-administrative authority; the extent and significance of administrative adjudication, principally with reference to independent regulatory commissions; the Administrative Procedure Acts. 3 units. Second semester. *TThS*, 9.
12. PARTIES AND PRESSURE GROUPS. *Mr. Vieg*. A study of the role of parties and pressure groups in democratic government, the nature of the American party-lobby system, party platforms and leaders, tactics of pressure groups and the problem of civic indifference. 3 units. First semester. *MWF*, 9.
13. PUBLIC OPINION AND PROPAGANDA. The role of individual and group opinion in the modern state and world community, with particular consideration of propaganda and other pressure techniques developed to influence this opinion. Contemporary problems will be emphasized. 3 units. Second semester. (Omitted in 1950-51.)
162. READINGS AND RESEARCH IN GOVERNMENT. *Staff*. Reading programs for students capable of independent study in fields of special interest not included within the scope of regular courses including, when opportunity offers, research in nearby governmental agencies. Each program must be

approved in advance by some member of the Departmental staff. 2 or 3 units. Arranged.

165. AMERICAN FOREIGN POLICY. *Mr. Wolfe*. A study of the development of American foreign policy and the relationship it bears to domestic politics. General and regional policies are studied. 3 units. First semester. *MWF*, 10.

167. INTERNATIONAL POLITICS AND ORGANIZATION. *Mr. Wolfe*. An examination of selected geographical, economic, political and juridical problems bearing upon relations within the family of nations and the maintenance of international peace and security, organization and operations of the United Nations and its specialized agencies; diplomatic procedures, alliances, the balance of power. 3 units. Second semester. *MWF*, 10.

182. HISTORY OF POLITICAL THOUGHT. *Mr. Lee*. An intensive study of the major works of the more significant political philosophers in Western civilization from Plato to and including Marx. 3 units. First semester. *MWF*, 11.

183. PHILOSOPHY AND SCIENCE OF GOVERNMENT. *Mr. Lee*. and *Mr. Vieg*. A examination of politics, administration and law in relation to contemporary political theory and institutions, here and abroad, together with a review of the scientific method in social study. 3 units. Second semester. *MWF*, 11.

Honors Study

Students of marked capacity are invited to arrange with the Department for enrollment in programs of independent study culminating in the presentation of a dissertation on some subject of special interest and significance. One half of the minimum requirement of 12 units may be met by Government 182 and 183 which together constitute the Senior seminar.

STATISTICS FOR SOCIAL SCIENTISTS. For description see Economics 57.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ADMINISTRATIVE ORGANIZATION IN BUSINESS AND GOVERNMENT. *Mr. Benson*. 3 units. First semester. *TThS*, 8.

PERSONNEL ADMINISTRATION. *Mr. Phelps*. 3 units. Second semester. *TThS*, 10.

SEMINARS OFFERED BY DEPARTMENTAL STAFF IN THE CLAREMONT GRADUATE SCHOOL

202. AMERICAN CONSTITUTIONAL DEVELOPMENT. *Mr. Darby*. First semester.

230. POLITICS AND LEGISLATION. *Mr. Vieg*. First semester.

232. PUBLIC OPINION AND PUBLIC POLICY. *Mr. Lee*. Second semester.

For other seminars open to qualified seniors consult the catalog of The Claremont Graduate School and confer with the Department.

History

General requirement: History 1, or its equivalent, is a prerequisite for all other courses in history.

Concentration requirements: Students planning to concentrate in History are required to take History 1, 55, 140 and 190, as well as one semester of a proseminar in History. They should also take Political Economy 1, or Government 51 and Economics 51 during the Freshman and Sophomore years. During Junior and Senior years, in addition to History 140, History 190, and the proseminar, they are required to take at least 12 additional units of upper division courses in History, and at least 6 units of upper division courses in related field such as Economics, Government, Sociology, Religion, Literature, Philosophy. The courses in any program of concentration should be carefully integrated, and should be planned in consultation with a member of the History Department. All concentrators in History will write three examinations of a comprehensive nature near the end of Senior year. One of these will be the same for all concentrators in History, and will deal with the field as a whole, its point of view and method. In addition, each concentrator will select two from the following subjects in which to be examined: Ancient History; Europe, 312—1648; Europe since 1648; the United States; Latin America; the Far East.

Honors requirements: A student admitted to Honors Study in the Social Sciences with History as his major field will, in addition to the program of reading and conferences arranged with the member of the department who acts as his adviser, participate in a seminar including the departmental faculty and students in Honors, which will meet for the presentation of reports and discussion. Juniors will register for 141; Seniors will register for 191. Students must pass a test to demonstrate their ability to translate effectively historical materials in French, German, or Spanish by the beginning of Senior year. An honors thesis is required of all students in this program, and, near the end of Senior year, there will be a series of written comprehensive examinations in the major and minor fields as well as an oral examination.

b. THE DEVELOPMENT OF WESTERN CIVILIZATION. *The Departmental*
 7. The evolution of civilization in Europe from antiquity to the contemporary scene, and its spread throughout the world. Attention is paid to political, religious, intellectual, and economic forces of change. The aim is to lay a foundation for the understanding of contemporary problems. 3 units. *MWF*, 8, 9; *TT&S*, 9.

55b. HISTORY OF THE UNITED STATES. *Mr. Kemble.* The political, economic, and cultural development of the United States from its beginning as an outpost of European expansion to a position of independence and world pre-eminence. 3 units. *MWF*, 11.

c. HISTORY OF GREECE. *Mr. Carroll.* A survey of ancient Greece from the prehistoric age until the Roman conquest, with special emphasis on the

development and decay of the city-state and of Athenian democracy. The social, economic, and intellectual history of the period will be considered within the political frame of reference. 3 units. First semester. *MWF*, 10.

102. HISTORY OF ROME. *Mr. Carroll*. A study of Rome from the beginning of the city to the disappearance of the Empire. There will be special attention to the problems of imperial administration, the causes of the decline of the Empire, and the emergence of Christianity. 3 units. Second semester. *MWF*, 10.

103a, 103b. HISTORY OF THE MIDDLE AGES. *Mr. Learnihan*. History of Europe from Constantine to Charles V, with special emphasis on the economic, political, intellectual, and religious developments and the institutions and ideals underlying the transition from Mediterranean to European civilization. The first semester covers the period 312-1054; the second semester 1054-1500. 3 units. (Offered in alternate years; to be omitted in 1951-52.) *MWF*, 9.

107a, 107b. HISTORY OF ENGLAND. *Mr. Gleason*. The development of the main features of civilization in the British Isles. Emphasis is laid upon the evolution of religious, intellectual, and economic forms as well as the growth of political institutions. Thus the course is largely a study of the cultural heritage of America. First semester, Great Britain to 1688. Second semester, Great Britain since 1688. 3 units. *MWF*, 11.

113a, 113b. EUROPE SINCE 1870. *Mr. Meyer*. Political, economic, social, and intellectual developments will be studied with reference both to their intrinsic significance and to an understanding of contemporary Europe. Open to Sophomores who satisfy the instructor with regard to their preparatory work. 3 units. (Offered in alternate years; to be omitted in 1951-52.) *MWF*, 10.

114. HISTORY OF RUSSIA. *Mr. Meyer*. A survey of Russian political, economic and cultural history to 1917. This course may be followed by Government 126 to constitute a year's work in Russian History. 3 units. First semester. (Offered in alternate years; to be omitted in 1951-52.) *TThS*, 10.

115. MIDDLE EUROPE, 1815-1914. *Mr. Meyer*. A survey of developments in the zone of conflict between the western European nations and Russia. Emphasis will be placed upon the growth of German and Slavic nationalism, the birth and progress of the Second German Empire, and the decay of the Habsburg Monarchy. 3 units. (Offered in alternate years; to be omitted in 1950-51.)

117a, 117b. INTELLECTUAL HISTORY OF EUROPE. *Mr. Learnihan*. A study of the formation of the ideas and ideals significant in politics, religion, and science since classical times, their expression in literature and institutions, and their influence on the development of society. (Offered in alternate years; to be omitted in 1950-51; to be offered in 1951-52.)

10. THE WESTWARD MOVEMENT IN NORTH AMERICA. *Mr. Kemble*. A study of the migration of people, institutions, and ideas across the continent, from the establishment of the English colonies to the twentieth century. Some attention will be given to the parallel and overlapping movement of population in Canada. 3 units. Second semester. (Offered in alternate years; to be omitted in 1951-52.) *MWF*, 8.

11a, 123b. THE TEN REPUBLICS OF SOUTH AMERICA. *Mr. Herring*. The development of these republics since independence; some attention to their Indian and colonial backgrounds. Open to Juniors and Seniors. 3 units. (Offered in alternate years; omitted in 1950-51; to be offered in 1952-53.)

12a, 124b. MEXICO, CENTRAL AMERICA AND THE CARIBBEAN REPUBLICS. *Mr. Herring*. The development of the ten republics of "Middle America"; their Indian and colonial backgrounds; their history since independence; with some attention to the colonies of the United States and of European powers within the Caribbean area. Open to Juniors and Seniors. 3 units. (Offered in alternate years; omitted in 1950-51; to be offered in 1951-52.)

13a, 125b. STUDIES IN THE HISTORY OF MEXICO, CENTRAL AMERICA, AND THE CARIBBEAN REPUBLICS. *Mr. Herring*. Designed to supplement History 124a, 124b. Open only to students who are taking that course and upon permission of the instructor. 1 unit. (Offered in alternate years; omitted in 1950-51; to be offered in 1951-52.)

14. SOUTH AMERICA SINCE INDEPENDENCE. *Mr. Herring*. The development of the South American Republics since Independence with major attention to Argentina, Brazil, and Chile. Open to Juniors and Seniors. 3 units. First semester. (To be omitted in 1951-52.) *W*, 7:30-9:30 *p.m.*

15. STUDIES IN THE HISTORY OF SOUTH AMERICA SINCE INDEPENDENCE. *Mr. Herring*. Designed to supplement History 126. Open only to students who are taking that course and upon permission of the instructor. 1 unit. First semester. (To be omitted in 1951-52.) *W*, 5-6.

16. MODERN MARITIME AND NAVAL HISTORY. *Mr. Kemble*. A study of the development of sea power and commerce from the sixteenth century to the present. The growth and character of the great mercantile marines, the evolution of naval architecture, and the course and character of war at sea shall be considered. 3 units. First semester. (Offered in alternate years; omitted in 1950-51.)

17. THE STUDY OF HISTORY. *Mr. Learnihan*. An introduction to the mature study of history. Topics to be considered will include: the philosophy of history, schools of historical writing, historical bibliography, the techniques of historical investigation, evidence and its interpretation. The course is designed and required for concentrators in history in the first term of Junior year, but other Junior and Senior students may be admitted with the permission of the instructor. 3 units. First semester. *TTh*, 2:15-3:45.

141a, 141b. HISTORY AND HISTORIANS. *The Departmental Staff*. A consideration of the theory and interpretation of History through the reading of selected group of great historical classics, and a study of the development of historiography. Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T*, 7:30-9:30 p.m.

190. HISTORICAL PROBLEMS AND INTERPRETATION. *Mr. Meyer*. Readings and discussion of important aspects of European and American history. Consideration of major historical developments and some of the most significant works dealing with the several fields of History. The course is designed and required for Seniors concentrating in History. Other Seniors may be admitted with the permission of the instructor. 3 units. Second semester. *TTh*, 2:15 and arranged.

191a, 191b. SELECTED TOPICS FOR HISTORICAL INVESTIGATION. *The Departmental Staff*. Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T*, 7:30-9:30 p.m.

PRO-SEMINARS

The following courses are designed primarily for concentrators in history. Other students will be admitted with the permission of the instructor. It is intended to offer at least one pro-seminar in European and one in United States history each year, but the subjects studied may vary from time to time. Similar instruction in the history of Latin America and the Far East is available for Pomona Seniors in the offerings of Claremont Graduate School.

162. HISTORY OF THE RENAISSANCE AND REFORMATION. *Mr. Gleason*. An analysis of the transition from Medieval to Modern Civilization. Intellectual, social, economic, and particularly religious developments will be studied from their early manifestations in fourteenth century Italy to their culmination in northwestern Europe in the seventeenth century. 3 units. Second semester. (Offered in alternate years; omitted in 1950-51.)

167. ENGLAND IN THE NINETEENTH CENTURY. *Mr. Gleason*. Several aspects of the development of nineteenth century England will be selected for investigation, readings and reports. Prerequisite: History 107b or the permission of the instructor. 3 units. (Offered in alternate years; to be omitted in 1951-52.) Second semester. *MW*, 2:15 and arranged.

168. CONTEMPORARY MIDDLE EUROPE. *Mr. Meyer*. The effects of the two world wars upon mid-European society, and the struggle for supremacy between democracy, fascism, and communism. Prerequisite: History 115. 3 units. Second semester. (Offered in alternate years; omitted in 1950-51.)

170. HISTORY OF WESTERN AMERICA. *Mr. Kemble*. The exploration, economic exploitation, and settlement of Western North America by Spaniards, Russians, and Anglo-Americans. Attention is given to the evolution of political, cultural, and economic institutions, and the opening of routes of communication.

n. Lectures and directed research in the splendid materials contained in the Henry R. Wagner Collection of History and Cartography of the North Pacific and the Mason Library of California and Western American History. 3 units. Second semester. (Offered in alternate years; omitted in 1950-51.)

2. AMERICAN CIVILIZATION, 1763-1828. *Mr. Kemble*. A study of significant aspects of American political, economic, and intellectual history between the closing years of the Colonial Period and the Age of Jackson. 3 units. First semester. (Offered in alternate years; to be omitted in 1951-52.) *MW*, 2:15 and arranged.

STORY OF CHINA. For description see Oriental Affairs 103a, 103b.

CHINESE HISTORY AND CULTURE. For description see Oriental Affairs 111.

AVAILABLE AT SCRIPPS COLLEGE

100. ECONOMIC CHANGE IN THE UNITED STATES. *Mr. Britt*. Second semester. *TThS*, 10.

108. CONTEMPORARY SOCIAL AND POLITICAL HISTORY. *Mr. Mann*. Year course. (Offered in alternate years; omitted in 1950-51.)

109. MODERN EUROPE, 1648-1870. *Mr. Mann*. Year course. (Offered in alternate years; to be omitted in 1951-52.) *MWF*, 8.

114. PROGRESS AND MEANING OF THE SCIENCES. *Miss Smith*. Year course. Arranged hours.

120. AMERICAN SOCIAL AND POLITICAL IDEAS. *Mr. May*. Year course. Prerequisite History 55 or equivalent, or permission of the instructor. *TTh*, 9 and arranged.

SENIOR HUMANITIES. *Staff*. Discussion of the contemporary American scene. Year course. *MWF*, 9.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

These offerings are designed primarily for graduate students, but are open to qualified Seniors by permission of the chairman of the department and the instructor.

1. STUDIES IN EUROPE SINCE 1914. *Mr. Cooke*. Second semester. 5 units. 4-6 and 7:30-9:30 p.m.

2. AMERICAN DIPLOMATIC HISTORY. *Mr. Cooke*. First semester. 5 units. 4-6 and 7:30-9:30 p.m.

3, 227b. THE UNITED STATES IN THE 19TH CENTURY. *Mr. Bradley*. 5 units. 1:30-3:30.

4. HISTORICAL LITERATURE OF THE UNITED STATES. *Mr. Bradley*. 5 units. First semester. *MTh*, 4-6.

250. TOPICS IN THE HISTORY OF THE PACIFIC. *Mr. Bradley*. 5 units. Second semester. *Th*, 4-6.

254a, 254b. THE COLONIAL PERIOD OF LATIN AMERICA. *Mr. Herring*. 3 units.

254b only will be given in 1950-51. First semester. *T*, 7:30-9:30 p.m.

257a, 257b. THE DIPLOMATIC RELATIONS OF THE UNITED STATES WITH LATIN AMERICA. *Mr. Herring*. 3 units. *T*, 7:30-9:30 p.m. (Omitted in 1950-51.)

Mathematics

Requirements for concentration: In addition to the basic courses of Mathematics 1a, b or 52a, and 65a, b, it is necessary to take the following courses: Mathematics 118, 119, 125, 151a, b, and at least three more upper division or graduate units in the department of Mathematics*. The remaining six units may be taken in Mathematics* or selected from Physics 113a-b, 191a, b, Astronomy 155.

Mathematics 1a, b is normally prerequisite for all other work in the department. Students who have had trigonometry in high school may take an examination in mathematics on the Saturday preceding registration. If a satisfactory grade is made on this examination, the student may enroll in Mathematics 52a if he so desires.

1a, 1b. INTRODUCTION TO COLLEGE MATHEMATICS. *Departmental Staff*. While this course prepares students for work in the calculus, it is at the same time comprehensive enough to provide in itself a general mathematical background. It is designed for students who have not had trigonometry, but is open to students who do not wish or are not able to qualify for the alternative described above. It includes college algebra, trigonometry, and an introduction to analytic geometry and calculus. 3 units. *MWF*, 10; *MWF*, 11; *TThS*, 8.

52a, 52b. PLANE AND SOLID ANALYTIC GEOMETRY. *Mr. Tolsted*. A study of the straight line, conic sections, higher plane curves, various coordinate systems. In the second semester a study will be made of planes, curved surfaces, space curves and solution of spherical triangles. Prerequisite to 52b is either Mathematics 1 or Mathematics 52a. Credit will not be given for both Mathematics 1 and 52a. 3 units. *MWF*, 11.

65a, 65b. DIFFERENTIAL AND INTEGRAL CALCULUS. *Staff*. This is a standard course in the theory and application of the calculus. 3 units. *MWF*, 9; *TThS*, 9.

*Mathematics 228 may not be offered in fulfillment of requirements for concentration.

HIGHER ALGEBRA. *Mr. Jaeger*. Permutations, combinations, probability, binomial and multinomial theorems, summation of series, and other algebraic topics. 3 units. First semester. *TThS*, 9.

THEORY OF EQUATIONS. *Mr. Jaeger*. The theory and solution of algebraic, transcendental equations; determinants and matrices. 3 units. Second semester. *TThS*, 9.

INTERMEDIATE CALCULUS. *Miss Walton*. Topics not taken up in Mathematics 65, with special emphasis on multiple integrals, partial differentiation, series with applications of each of these. 3 units. Second semester. *F*, 9.

151b. DIFFERENTIAL EQUATIONS. *Mr. Jaeger*. A general course in the theory, solution, and application of differential equations. 3 units. *MWF*, 8.

152b. ADVANCED CALCULUS. *Mr. Tolsted*. Partial derivatives, multiple integrals, Taylor and Fourier series, line and surface integrals, improper integrals, elements of complex variable. 3 units. *TThS*, 10.

PROJECTIVE GEOMETRY. *Mr. Tolsted*. Analytical treatment of linear and quadratic forms; projective, metric, and affine transformation; and projective geometry of conics. 3 units. First semester. (Omitted in 1950-51.)

185b. VECTOR ANALYSIS. *Mr. Hamilton*. Algebra and calculus of vectors; divergence and Stokes' theorems; curvilinear coordinates; harmonic functions, and applications to electrostatics. 3 units. *MWF*, 9.

MATHEMATICAL STATISTICS. *Mr. Hamilton*. The mathematical basis for statistical theories and methods with applications from various fields. Pre-requisite, Mathematics 65a, b. 3 units. First semester. *MWF*, 9.

198b. SELECTED TOPICS IN HIGHER MATHEMATICS. *Staff*. Special work not included in the preceding will be offered in this course. 3 units. Second semester.

MATHEMATICAL PHYSICS. For description see Physics 191a-191b.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

The following courses, listed among the offerings of the Claremont Graduate School, are open to superior undergraduates who have satisfied the prerequisites.

200b. NUMBER THEORY. *Mr. Jaeger*. Properties of integers, linear and quadratic congruences, and algebraic numbers. Prerequisite Mathematics 65. 3 units. *MWF*, 10.

205b. DIFFERENTIAL GEOMETRY. *Mr. Tolsted*. The study of curves and surfaces in three dimensional Euclidean space, introducing the tensor calculus.

(the principal mathematical tool in the study of the theory of relative motion.)
Prerequisites Mathematics 52b or equivalent and Mathematics 152. 3 units.
Arranged.

210a, 210b. COMPLEX VARIABLE. *Mr. Hamilton.* Algebra and calculus of complex variables; infinite series; Cauchy's Theorem and consequences including Taylor and Laurent expansions and classification of singularities; entire functions; meromorphic functions. Prerequisite, Mathematics 152. 3 units. Arranged.

215a, 215b. REAL VARIABLE. *Mr. Tolsted.* Fundamentals of the theory of functions of a real variable. Introducing abstract spaces, measure theory, Lebesgue integration. Prerequisite, Mathematics 152. 3 units. (Omitted 1950-51.)

228. THE TEACHING OF MATHEMATICS is offered during the Claremont Summer session.

PRE-ENGINEERING

In the following courses three hours of work are required for each unit. It is necessary that the student attend class on the hour agreed upon for lecture, but it is not mandatory that the laboratory work be done in only one or two periods. Credit will not be given for only 1 unit of work.

The letters a, b, c, d, refer to units of work, each letter being associated with one unit. All units are available each semester. A student may enroll in any unit for which he is qualified.

7a, 7b, 7c, 7d. ENGINEERING DRAWING. *Mr. Grimm.* A beginning course in mechanical drawing and applied geometry. Includes lettering, orthographic projection, visualization of simple objects, and making working drawings of machine assemblies. 1 or 2 units per semester. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged.

40a, 40b, 40c, 40d. DESCRIPTIVE GEOMETRY. *Mr. Grimm.* Prerequisite: Engineering Drawing 7a and 7b, or previous drawing experience. Theory and principles of projection including points, lines, planes, shades and shadows, plane sections and development of surfaces, and intersections of surfaces. Practical problems from the student's chosen field will be given towards the end of 40d. 1 or 2 units per semester. For a well rounded course 40a should be taken immediately after Engineering Drawing 7. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged.

101a, 101b, 101c, 101d. ARCHITECTURE. *Mr. Grimm.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, and sufficient knowledge of physics that the student is at least conversant with the subjects of mechanics, heat, sound, electricity, and light. Basic work in architectural design including consideration of construction details, materials, wiring, lighting, plumbing, and heating.

or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

102a, 102b, 102c, 102d. **MECHANISMS.** *Mr. Grimm.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, Physics 51a. Practice in the graphical solution of structures, gears, cams, and machine mechanisms, using the principles of statics and kinematics. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

103a, 103b, 103c, 103d. **TOPOGRAPHICAL DRAFTING.** *Mr. Grimm.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b. Practice in the making of topographical maps and the construction of models. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

104a, 104b, 104c, 104d. **PRODUCTION ILLUSTRATION.** *Mr. Grimm.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, 40c, 40d. Practice in the making of isometric, oblique, and diametric sketches and drawings including the use of special instruments. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

105a, 105b, 105c, 105d. **DESIGN OF MACHINE ELEMENTS.** *Mr. Grimm.* Prerequisite: Engineering Drawing 102a, 102b, 102c, 102d. The design of machines from the student's chosen field. 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

AVAILABLE AT CLAREMONT SUMMER SESSION

106. **SURVEYING.** *Mr. Grimm.* 3 units. Offered in Claremont Summer Session.

Military Science

The College maintains an Infantry Unit, Senior Division, of the Reserve Officers' Training Corps, established under the National Defense Act for the purpose of training students to become officers of the Army of the United States. During the past year the emphasis of this training has been changed so that the ROTC now constitutes the principal source of procurement of junior officers for the Regular Army with the general purpose of providing officers for the Officers' Reserve Corps and National Guard. Those students who successfully complete the four year course will be tendered commissions as second lieutenants of Infantry in the Organized Reserve Corps, while those of outstanding proficiency will be offered a similar opportunity in the Regular Army.

The courses include both classroom and out-of-doors instruction. Instruction in military theory has been greatly expanded since World War II and covers the basic technical knowledge required of a lieutenant in the United States Army. One drill period a week provides a limited opportunity for the

practical application of command and assists in the improvement of the posture and physical coordination of the student. Special emphasis is placed on the development of the qualities of leadership throughout the course. The position acquired by the student and his experience in the art of command may be applied in any walk of life.

The instructors in the department are officers of the regular army detailed for duty at the college by the Department of the Army. The most modern weapons, equipment and types of instructional material are furnished to give the students practical experience in handling such equipment.

The four year course is divided into the basic course which consists of MS I and MS II (each requiring two terms) and the advanced course which consists of MS III, MS IV (each requiring two terms) and one summer training camp of six weeks duration. Enrollment in the basic or advanced course is voluntary. However, when a student has elected either course the completion of the second year of that course becomes a prerequisite for graduation.

The basic course is open to all physically fit male students who are American citizens. Enrollment does not interfere with the participation in sports by the students nor in other activities of the college. Uniforms and books for these courses are issued to the students without charge.

Military service during World War II furnishes a basis for credit for basic course instruction according to the individual's length of service, type of training, and honorable discharge from the military or naval service of the United States. Credit is also allowed for prior Senior or Junior ROTC training. Application for advanced standing must be made during registration and discharges from the military or naval service or certificates showing successful completion of ROTC courses at other schools should be presented at that time.

Enrollment in the advanced course (MS III and IV) is limited to selected members who have completed the basic course, or have received equivalent credit because of military or naval service, and who enter into an agreement to attend one summer training camp. In consideration of this agreement students receive cash allowances from the government equivalent to a scholarship of about \$310.00 a year. All necessary expenses in connection with the training camp, including transportation to and from camp, food, housing, pay, uniform and medical attention are provided by the government.

Quotas for draft deferment in the past have been sufficient to grant deferment to all enrolled ROTC students. A student enrolled in ROTC may anticipate, therefore, that he will not have his college work interrupted by being drafted for military service.

Graduating students who have maintained a high standing in military subjects may be designated by the Professor of Military Science and Tactics as "Distinguished Military Students" because of their demonstrated leadership, aptitude and academic proficiency. The Senior ROTC will provide the principal source of procurement of junior officers for the Regular Army through

selection of distinguished military graduates of the Senior ROTC Units for direct Regular Army appointment without further mental examination. Through voluntary extended active duty-tours other graduates will be selected for appointment as officers of the regular army.

151b. MILITARY SCIENCE COURSE I. *Staff*. Military Organization; Military Policy of U. S., National Defense Act and ROTC; Evolution of Warfare; Maps and Aerial Photographs; Military Psychology and Personnel Management; First Aid and Hygiene; Geographical Foundations of National Power; Military Problems of the U. S.; Military Mobilization and Demobilization; Leadership, Drill, and Exercise of Command, $2\frac{1}{2}$ units. Class *TTh*, 8, 9, or 10; *M*, 1:15-2:05.

152a-53b. MILITARY SCIENCE COURSE II. *Staff*. Introduction to Branch Technique; Leadership, Drill and Exercise of Command. $2\frac{1}{2}$ units. Class *TTh*, 9, or 10; *M*, 1:15-2:05.

153a-105b. MILITARY SCIENCE COURSE III. *Staff*. Branch Tactics and Technique (Infantry); Leadership, Drill and Exercise of Command. 4 units. Class *WF*, 8 or 9; *M*, 1:15 and *F*, 11 or 1:15.

154. MILITARY SCIENCE ROTC SUMMER CAMP. *Staff*. Military sanitation; chemical warfare; safeguarding military information; drills and parades; weapons and marksmanship; information and education; interior guard duty; mess management; physical training and athletic; marches and bivouacs; tactics and technique. 3 units. Six weeks in June and July at camp designated by army commander.

155a-157b. MILITARY SCIENCE COURSE IV. *Staff*. Military Administration; Military Law and Boards; Military Teaching Methods; Psychological Warfare; Branch Tactics and Technique (Infantry); Leadership, Drill and Exercise of Command. 4 units. Class *MWF*, 8 or 9; *M*, 1:15 and *F*, 11 or 1:15.

Advanced students in Military Science are required to attend a summer camp in which 3 units of credit are allowed toward graduation.

Music

Recognizing a dual function in its educational approach, the Music Department endeavors to meet the needs of both the general and the pre-professional student. It offers to the first type a wide selection of both participating and non-participating courses, in order to aid him in giving music a place of importance in his future cultural life and experience. To the second type, who enter the music profession as teachers and performers, the music concentration program affords a thorough and broad pre-professional training, leading to graduate study.

Requirements for concentration: The following courses are required of all students concentrating in music: Music 1, 2, 55, 56, 104, 107, 159, and 195. Students entering as upperclassmen should take the Lower Division course (under 100) before coming to Pomona. In addition to the above, a student must take the following courses, according to his particular field of music concentration: in Theory, Music 113 and 158; in History, Music 160 and 163; in Applied, Music 11, 61, 111, 161.

Comprehensive Examinations. All students concentrating in music must take a comprehensive examination based upon Music 104, 107, and 159 during the senior year. For those whose field is Theory such examination will also include Music 113 and 158. Those concentrating in History will include Music 160 and 163. (For comprehensive examinations in Applied Music refer to "Examinations in Applied Music.")

THEORY, APPRECIATION AND HISTORY

1a-1b. **ELEMENTARY HARMONY.** *Mr. Allen and Mrs. Briggs.* Thorough grounding in the fundamentals of music through the mediums of hearing, singing, writing, and the keyboard. Study of major and minor modes; all diatonic triads, and seventh chords and all non-chordal tones. Harmonic analysis of melodies. Four-part writing based on the techniques of the 17th and 18th centuries. Prerequisite, ability to play a simple hymn at the keyboard. Credit for this course is given only when accompanied by 2a-2b. 3 units. *MWF, 9 or 1:15.*

2a-2b. **EAR TRAINING AND SIGHT SINGING.** *Mrs. Briggs.* Training in melodic, rhythmic and harmonic relationships through singing and dictation. Keyboard practice in simple modulations and cadential combinations. To be taken with 1a-1b. 2 hours, 1 unit. *MW, 1:15; TTh, 1:15 or arranged.*

53a-53b. **INTRODUCTION TO MUSIC.** *Mr. Dayton.* A non-technical listening course to acquaint the student, through analytical study, with the symphony, opera, chamber and solo music heard in concert today. No previous musical experience required. 3 units. *MW, 2:15-3:30.*

55a-55b. **ADVANCED HARMONY.** *Mr. Allen and Mr. Kohn.* A study of part-writing technique as found in the Bach Chorales. Chromatic harmony and

ulation. Practice in instrumental styles. Prerequisite, Music 1 and 2. Credit for this course is given only when accompanied by 56a-56b. 3 units. *F, 10 or 11.*

56b. ADVANCED EAR TRAINING AND KEYBOARD HARMONY. *Mr. Kohn.* Training in the hearing of progressions involving chromatic chords, largely through harmonic dictation. Keyboard work including modulation and sight-tonization of melodies. 2 hours, 1 unit. *MW, 2:15; TTh, 10 or arranged.*

103b. MUSIC IN AMERICAN HISTORY. *Mr. Fiske.* This course is designed to provide the general student with an understanding of the part music has played in the social and educational growth of the United States, from the colonial period to the present day. Attention will be given to folk, popular, and art music and their importance in various phases of our national cultural development. Not limited to music students. 3 units. *TThS, 9.* (Offered in alternate years; to be omitted in 1951-52.)

104b. HISTORY OF MUSIC. *Mr. Fiske.* Intended to familiarize the student with the major trends in the history of music from the early Christian era to the present, with special emphasis on composers, music and developments from the 16th century onward. Considerable attention is given to current problems of the present day. Prerequisite, Music 1 or permission of instructor. 3 units. *TThS, 9.* (Offered in alternate years; to be omitted in 1952.)

107b. COUNTERPOINT. *Mr. Allen.* An analytical study of the Palestrina technique. Two and three-voice writing in free style. Original work in the forms of the classical suite, chorale prelude and variations. Prerequisite, Music 3 units. *TThS, 10.*

113b. ORCHESTRATION AND INSTRUMENTATION. *Mr. Blanchard.* A study of the instruments of the modern orchestra and band, their technical possibilities and limitations. Practical laboratory work in scoring for instrumental ensembles. Choral arranging for various voice combinations with and without accompaniment. Opportunity will be provided for public performance of outstanding scores. Fundamentals of conducting will be stressed throughout the course. Prerequisite, Music 55. 3 units. *MWF, 8.*

158b. FREE COMPOSITION. *Mr. Parrish.* Advanced original work in polyphonic and homophonic forms, planned to develop the student's sense of musical structure and his individual manner of musical expression. Prerequisite, Music 107. 3 units. Arranged.

159b. FORM AND ANALYSIS. *Mr. Blanchard.* Designed to lead to a clear understanding of the principles upon which musical form is based, and to the application of these principles in the works of the great masters of form. Prerequisite, Music 55. 2 units. *TTh, 8.*

160a-160b. STUDIES IN RENAISSANCE AND BAROQUE MUSIC. *Mr. Parrish*. Stylistic analysis of the important vocal and instrumental literature from the period of Dufay through the age of Bach and Handel. Prerequisite, Music 104. 3 units. Arranged. (Offered in alternate years; to be omitted in 1951-52.)

163a, 163b. STUDIES IN THE MUSIC OF THE CLASSICAL PERIOD. *Mr. Parrish*. A survey of the instrumental and vocal compositions of the age of Haydn, Mozart and Beethoven, with detailed analysis of certain of the great and characteristic symphonic, chamber, operatic, choral and keyboard compositions of the period. Prerequisite, Music 104. 3 units. *MW, 2:15-3:30*. (Offered in alternate years; to be given in 1951-52.)

195a, 195b. MUSIC SEMINAR. *Mr. Parrish and the departmental staff*. Study in the development of musical style, designed to aid the student in integrating his previous historical, theoretical and interpretative studies into broad concepts of musical evolution. While the areas covered are grouped for convenience into musical literature, theory and performance practices, emphasis is placed on the inter-relationship of all these phases. Required of all senior majors in music. 1 unit. *F, 2:15*.

APPLIED MUSIC

Credit for individual and class work in Applied Music is open to all students in the college, subject to the following provisions: (1) a total of not more than 16 units of instruction in Applied Music may be counted toward the Bachelor of Arts degree. Credit of 2 units per semester is given for two private lessons weekly, 1 unit per semester for one private lesson weekly. (2) Music 1 and 2 must accompany or precede all credit study. Music 1 and 56 must accompany or precede more than one year of credit study for those taking two lessons weekly.

Those not concentrating in music may obtain additional credit for one lesson per week upon completion of Music 1 and 2. Students preparing to concentrate in Applied Music are required to take two lessons per week in their major subject and to appear frequently in recitals.

II. APPLIED MUSIC (Freshman level)

61. APPLIED MUSIC (Sophomore level)

III. APPLIED MUSIC (Junior level)

161. APPLIED MUSIC (Senior level)

No credit is given for work in Applied Music taken elsewhere. All private lessons one-half hour in length.

VOICE, *Mrs. Briggs, and Mr. vom Lehn*

ORGAN, *Mr. Blanchard*

PIANO, *Mr. Dayton, and Mr. Kohn*

VIOLIN AND VIOLA, *Mr. Fiske, and Miss Smith*

VIOLONCELLO, *Miss Jean*

WOODWINDS, *Mr. Orner*

BRASS, *Mr. Simpson*

Lessons on other instruments may be arranged through the office of the Music Department.

Examinations in Applied Music. Examinations, to be given before the entire Music Faculty, are required of all students in Applied Music, as follows:

Qualifying Examination for Lower Division Credit—to be given, normally, at the beginning of the Freshman year to determine eligibility for credit. No credit is given for elementary study.

Qualifying Examination for Upper Division Credit—to be given, normally, at the end of the Sophomore year to obtain faculty recommendation for concentration in Applied Music. Should a student fail to qualify for such commendation, he may repeat the examination at the beginning of his junior year. Transfer students will be examined upon entrance.

Students who fail to pass the Qualifying Examination for Upper Division Credit but wish additional credit may, by special examination, be allowed a maximum of 4 more units at the Lower Division level.

Senior Comprehensive Examination in Applied Music—all students concentrating in Applied Music will present a satisfactory senior public recital and take the comprehensive Applied Music Examination to be given at the end of the senior year.

Printed information concerning the Qualifying Examinations may be obtained from the Music Department.

GROUP ACTIVITIES

As an important force in the educational life of Pomona College, the Music Department offers opportunity for participation in various instrumental and choral activities on an extra-curricular as well as a credit basis. Not more than two of the following credit-courses may be taken simultaneously. Permission of the instructor is required.

57b. CHORAL SINGING. *Mr. vom Lehn.* The study and production of choral music, especial attention being given to diction, phrasing, content of works dealt with, and an understanding of musicianship as applied to choral singing. The class will be organized as the College Choir and as such will meet on Mondays, Wednesdays and Fridays from 11:55 to 12:20, and on Tuesdays from 11:30 to 12:20. 1 unit. The course may be repeated for credit. Fee to cover cost of music, \$1.50.

58b. ORCHESTRA. *Mr. Fiske.* A study of major works of orchestral repertoire and application of the principles of orchestral routine through public performance. Two periods of attendance weekly. Additional sectional rehearsals at option of director. The course may be repeated for credit. 1 unit. Fee, 4:15.

59b. BAND. *Mr. Simpson.* The study and production of the best in concert band repertoire. Two periods of attendance weekly. The course may be repeated for credit. 1 unit. MW, 4:15.

MEN'S AND WOMEN'S GLEE CLUBS. *Mr. vom Lehn*. The Glee Clubs afford opportunity for the study of the finest in both sacred and secular choral music. Frequent public performances are given. Admission by tryout. No credit.

CHAMBER MUSIC. *Mr. Fiske*. Opportunity for participation in various small instrumental groups is available to qualified students. No credit.

FEES FOR INSTRUCTION AND PRACTICE

<i>For those paying regular tuition:</i>		PER SEMESTER
One-half hour private lesson per week		\$45.00
Each additional half-hour		40.00
<i>For those carrying less than ten hours of college work, exclusive of work in applied music:</i>		
One-half hour private lesson per week		60.00
Each additional half-hour		40.00
Class instruction		25.00

PRACTICE FEES

	PER SEMESTER
Grand piano, one hour daily	\$10.00
Upright piano, one-half hour daily, \$3.50; one hour daily	6.00
Bridges Hall Organ (four manuals), one hour weekly	5.00
Two-manual Organ, one hour weekly	2.50
Bridges Auditorium Organ, Claremont College, (advanced students only) one hour weekly	15.00

AVAILABLE AT SCRIPPS COLLEGE

II-69. NINETEENTH CENTURY MUSIC. *Mr. Pattison*. Year course. TTh, 1:2:45.

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Graduate work in Theoretical and Applied Music is offered under the auspices of the Claremont Graduate School.

Oriental Affairs

A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year's work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Art 117, 153; Philosophy 126.

51a, 51b. THE CULTURAL LEGACIES OF EAST ASIA. *Mr. Ch'en*. A survey of the humanistic achievements of China and India, and their diffusion in other lands in East Asia. A general introduction to East Asian literature, philosophy, religion, and art. 3 units. MWF, 10.

52b. FIRST YEAR CHINESE. *Mrs. Soong*. A course for beginners in the Chinese language, with equal emphasis on the analysis of written characters and on actual use of the spoken language. 3 units. *MWF*, 8.

103b. HISTORY OF CHINA. *Mr. Hughes*. General survey of Chinese history, with emphasis on such topics as the rise of philosophical schools, important movements in literature and art, and the evolution of social and political institutions. An effort will be made to interpret the complexities of the problem of present day China in the light of her ancient cultural heritage. 3 units. *MWF*, 9.

CHINESE LITERATURE IN TRANSLATION. *Mrs. Soong*. A study of outstanding Chinese literary works in English translation with the aim of a deeper appreciation of Oriental life and thought. 3 units. Second semester. *F*, 11.

THE CONTEMPORARY FAR EAST. *Mr. Ch'en*. The impact of Occidental cultures and peoples upon Eastern Asia, including India and Malaysia; the political, intellectual, and moral resources of Oriental nations; the post-war problems of these countries today. 3 units. First semester. (Omitted in 1951.)

JAPANESE HISTORY AND CULTURE. The evolution of Japanese social, economic, and political institutions since prehistoric times. Geographical conditions and the development of Japanese philosophy, literature, and the arts will receive some stress. About one-third of the course will deal with Japan since 1603. 3 units. First semester. *TThS*, 10. (Omitted in 1951.)

EASTERN ASIA IN THE NINETEENTH CENTURY. A consideration of the traditional patterns of life and institutions in China under the Manchus, in Meiji Japan, and to a lesser extent under the old regimes in Korea, Siam, and Southeastern Asia prefaces a study of the impact of Western imperialism and civilization upon those countries. Domestic developments receive slightly more emphasis than foreign relations. 3 units. First semester. *F*, 8. (Omitted in 1950-51.)

EASTERN ASIA IN THE TWENTIETH CENTURY. Cultural and political institutions which began or have been accentuated since the turn of the last century and which still are in progress will be studied. Special attention is given to the implications of such forces as nationalism and imperialism, autocracy and totalitarianism, capitalism and communism, science and industrialism, operating as the Far East evolves new modes of thought, organization and behavior. It is suggested but not required that this course be preceded by Oriental Affairs 123. 3 units. (Omitted in 1950-51.)

HISTORY OF CULTURAL RELATIONS BETWEEN CHINA AND THE OCCIDENT. *Ch'en*. A rapid survey of the religious, intellectual, literary and artistic

relations and interchanges between China and the Western World from Greco-Roman times to the middle of the nineteenth century. 3 units. Second semester. *T evening*. (Omitted in 1950-51.)

151a, 151b. SECOND YEAR CHINESE. *Mrs. Soong*. An intermediate course open to those who have had 52a, 52b. 3 units. *MWF, 2:15*.

160. HISTORY OF FAR EASTERN DIPLOMACY. Some attention to European relations with Malaysia and Indonesia, and to the period 1500-1800; major emphasis on diplomatic relations of the Western Powers and Russia with China, Japan, Korea, and the Philippines since 1800. 3 units. First semester. (Omitted in 1950-51.)

181a, 181b. THIRD YEAR CHINESE. *Mrs. Soong*. A continuation of 151a, 151b with exercises in reading classical (Wenli) Chinese prose and poetry. 3 units. Arranged.

195. READINGS IN ORIENTAL AFFAIRS. *Staff*. 2 or 3 units. Each semester. May be repeated for credit. Arranged.

ART OF THE FAR EAST. For description see Art 117a-117b.

ORIENTAL PHILOSOPHY. For description see Philosophy 126.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

221a, 221b. STUDIES IN CHINESE THOUGHT. *Mr. Hughes*. Arranged.

261. PROBLEMS IN CHINESE HISTORY *Mr. Ch'en*. Each semester. Arranged.

Philosophy

Courses 55 and 57 are general introductions to philosophy. They are recommended for students who wish a general acquaintance with the subject. Either satisfies the distribution requirement.

Concentration: Students planning to concentrate in philosophy must take Philosophy 55 and twenty-four hours of upper division work. Eight of these must be in the field of philosophy, but six hours of work may be chosen from other departments if the selection is approved by the student's adviser. An introductory course in psychology is recommended.

Students transferring to Pomona at the beginning of the Junior year are eligible to concentrate in philosophy provided the lower division prerequisites

met before entrance or can be met during the Junior year. Information concerning the Honors program in philosophy may be obtained from the department. Those intending to do graduate work in philosophy should have a reading knowledge of French and German.

INTRODUCTION TO LOGIC. *Mr. Iredell*. A study of the elements of deductive and inductive reasoning with special emphasis upon the nature and use of scientific hypotheses, probability, and deductive and inductive fallacies. 3 units. Second semester. *MWF*, 8.

55b. HISTORY OF EUROPEAN PHILOSOPHY. *Mr. Jones* and *Mr. Sayre*. A study of the main currents of European philosophy from the earliest Greek thinkers through modern philosophic thought. The course is designed to be a general and cultural introduction to philosophy through a study of its history. 3 units. Three sections. *MWF*, 10, 2:15; *TThS*, 10.

57b. PROBLEMS OF PHILOSOPHY. *Mr. Iredell* and *Mr. Sayre*. An introductory consideration of the meaning and method of philosophy, an examination of problems which emerge in the physical and biological sciences, and a review of some of the main philosophic estimates of life. 3 units. Two sections. *MWF*, 2:15; *TThS*, 8.

PHILOSOPHY OF ART. *Mr. Jones*. An investigation of the nature of a work of art and of the significance and limitations of the aesthetic experience. The course is designed primarily for students working in some form of artistic expression who are interested in studying the relations of this activity to the other arts and to the several problems of communication and values. (Admitted in 1950-51.)

ORIENTAL PHILOSOPHY. *Mr. Iredell*. This course is designed to provide the student with a general background of oriental thought as a basis for further study of oriental life and culture. An attempt will be made to gain an appreciation of the thought life of the Orient through a study of some of the more important thinkers and schools of oriental philosophy and through a comparison of oriental and western philosophical views and cultural ideals. 3 units. First semester. *MWF*, 8.

TYPES OF ETHICAL THEORY. *Mr. Sayre*. A consideration of some representative solutions for the main problems of moral theory. The course is designed for students interested in thinking critically about ordinary beliefs concerning conduct. 3 units. First semester. *TThS*, 9.

PHILOSOPHY OF THE STATE. *Mr. Sayre*. A critical investigation of such central political concepts as: the state, society, the individual, freedom, law, rights, duty, property, etc. The course will emphasize applications to currently competing systems; it is therefore designed for the student who is keenly aware of the clashes in ideals around him and who is willing to push systematically to the roots of these clashes. 3 units. Second semester. *TThS*, 9.

141. READINGS IN PHILOSOPHY. *Staff*. A course consisting of readings, papers, and oral reports. The material is designed to enrich a student's knowledge of philosophical literature and to aid him to integrate his work in the field and to relate it to the material of other fields. The content of the course will vary according to the needs of those enrolled and may be repeated for credit during the Junior and Senior years for a total of 6 hours. The course is normally open only to those concentrating in philosophy. Permission of the instructor is required for registration. 1-3 units. Each semester. Arranged by instructor.

151. SOME REPRESENTATIVE PHILOSOPHIES OF LIFE. *Mr. Jones*. A study of some detail of several different world views which have become a part of the heritage of the western mind. Among the writers considered are Plato, Augustine, and Dante. To be given if there is sufficient demand. 3 units. First semester. *MWF, 11.*

152. THE NINETEENTH CENTURY. *Mr. Jones*. A study of the main currents of 19th century thought and of their reflection in the literature, the history, and the social movements of the period. The impact of science on religion, the conflict between individualism and collectivism, and the development of naturalism and romanticism are among the movements considered. To be given if there is sufficient demand. 3 units. Second semester. *MWF, 11.*

153. PHILOSOPHY OF SCIENCE. *Mr. Sayre*. A consideration of the basic concepts and methods underlying contemporary scientific thought. The concepts of space, time, matter, energy, empirical method, etc. will be examined critically with special emphasis on current anti-Newtonian theory. 3 units. Second semester. *MWF, 8.* (Omitted in 1950-51.)

154. CONTEMPORARY PHILOSOPHY. *Mr. Iredell*. A study of contemporary philosophic thought through some of the main modern thinkers with special reference to the dominant ideas of the civilization of today. Prerequisite: Philosophy 55 or 57, or such previous work as will provide an equivalent grasp of the basic problems of philosophy. 3 units. Second semester. *MWF, 11.* (Omitted in 1950-51.)

PHILOSOPHY OF RELIGION. For description see Religion 101.

INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. For description see Education 151.

AVAILABLE AT SCRIPPS COLLEGE

IV-159. HISTORY OF IDEAS. *Mr. Barrett*. First semester. *TTh, 10* and arranged.

IV-160. CONTEMPORARY PHILOSOPHY. *Mr. Barrett*. Second semester. *TTh, 10* and arranged.

Physical Education

The program of Physical Education in Pomona College is based upon the belief that a liberal education should include knowledge of the structure and functions of the human mechanism; understanding of the hygienic practices which promote physical, mental and social health; reasonable skill in developmental and recreational activities of a physical type which will promote the individual's well-being during college years, and in later life; and a disposition to make such knowledge and skill essential elements in effective living.

Each student is required to take one unit of Physical Education Activities per semester during his Freshman and Sophomore years, and one-half unit per semester during his Junior and Senior years.

CONCENTRATION FOR PHYSICAL EDUCATION

This program, followed by a year of work in the Claremont Graduate School, will qualify the student for the general credential with a major in physical education. It will also qualify the student for advanced work in physical therapy, occupational therapy, and recreation. Students interested in the three latter fields should confer with some member of the physical education department during the freshman year since slight changes in the following program may be needed to qualify for entrance to some of these fields.

In order to complete all required courses in the four year college period students should take courses in the year in which they are suggested below.

FRESHMAN YEAR: Biology 1, English 1, Physical Education 5. Suggested: Speech and Drama 52.

SOPHOMORE YEAR: Zoology 60, Education 53, Psychology 51, Sociology 51 52.

JUNIOR YEAR: Zoology 121, Physical Education 123, 124, 129, 119 (women), Psychology 107. Suggested: Music 53.

SENIOR YEAR: Physical Education 126, 152, 154, 191 (men), 130 (women), Psychology 108.

In addition to the above, 6 units of physical education activities are required. It is suggested that these be so selected as to give the individual opportunity for both technical skills and leadership training in a wide range of activities.

Reading knowledge of French and German is highly desirable for students planning graduate research in physical education.

A non-credit Camp Counselor's training course for women is held for a one-week period immediately following Commencement when there is sufficient student demand for this course. The course aims to provide its members with experience and skills useful in summer camps, playgrounds, and other activities of community recreation.

THEORY

5. PRINCIPLES OF HEALTHFUL LIVING. *Staff*. An introduction to personal hygiene dealing with the meaning and significance of physical, mental, and social health as related to the individual and to society. Constructive methods of promoting the health of the individual. Defensive hygiene. Special health problems of college students and young people generally. In the course a men emphasis is placed upon the implications of the material for prospective teachers of health and physical education. Women, 3 units, first semester. *Miss Shurtz, MWF, 10*. Men, 2 units, first semester, *Mr. Malan. MW, 11*.

119a-119b. (Women) TECHNIQUE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Staff*. Analysis of techniques and methods of presenting the material for teaching at the elementary and secondary level. Laboratory work includes officiating in all team sports and playdays as well as assisting in the teaching of the team sports. Prerequisite—knowledge of the following physical education activities: archery, badminton, basketball, hockey, softball, speed ball, swimming, tennis, and volleyball. 3 units. Given in alternate years. *MWF, 9*. (Omitted in 1950-51.)

123. NATURE AND FUNCTION OF PLAY. *Miss Cawthorne*. The psychology of play and the function of play in growth, development and social adjustment. Methods of leadership and organization of play activities to bring out motor habits and use of the democratic process in play situations. Some attention is given to the elementary school physical education program. First semester. 2 units. *TTh, 8*.

124. COMMUNITY RECREATION. *Miss Cawthorne*. A study of the organization of school and municipal playgrounds and the contributions of the federal government to recreation programs in the United States. History of the Recreation Movement in the United States. Types of organization and leadership needed for conducting tournaments, active and quiet play programs, social recreation and camp activities. Study of the physical lay-out of different types of recreation centers. Survey of administrative set-ups for municipally financed recreation programs. Limited to Juniors and Seniors. Second semester. 2 units. *TTh, 8*.

126. COMMUNITY HYGIENE. *Miss Shurtz*. A survey of the field of public health and sanitation. Includes a brief historical account, a study of general factors influencing public health and a summary of public health agencies, their organization and activities. Extensive study of public and private water supplies, disposal of wastes, control of food and dairy products, proprietary medicine and quackery, and mental, industrial and school hygiene. Attention given to methods of setting up a school health program. Second semester. 3 units. *MWF, 10*.

129. KINESIOLOGY. *Miss Cawthorne*. An analysis of joint and muscular mechanisms, and their relation to problems of bodily development and efficiency. Prerequisite, Anatomy. 3 units. Second semester. *MWF, 8*.

a, 130b. THE HISTORY AND TEACHING OF DANCE. *Miss Burt*. Analysis of problems and techniques of presentation of rhythms for those preparing recreational leadership or for teaching at the elementary or high school level. The first semester includes the historical background of both folk and temporary dance and the theory and practice of teaching folk dancing; second semester includes a study of a creative process in dance, dance composition, and the techniques of teaching contemporary dance. Permission of the instructor is required. One hour lecture, two hours laboratory each semester. 2 units. Lecture *M*, 10; laboratory *WF*, 10.

PHYSICAL DEVIATIONS. *Miss Cawthorne*. Study of body mechanics and causes, prevention, and correction of physical defects. Laboratory work includes methods of examination, prescription of exercises. Prerequisite, 129. 2 units. First semester. *MW*, 8; and laboratory *F*, 8-10.

PRINCIPLES OF PHYSICAL EDUCATION. *Mr. Malan*. Limited to Seniors preparing to teach Physical Education. 3 units. Second semester. *MWF*, 11.

19-1b. (Men) THEORY AND PRACTICE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Staff*. Limited to senior majors in Physical Education. Others must have permission of department. 4 units *WF*, 1:15 and arranged. Practice teaching, three hours, arranged.

MEN

Students engage in programs of physical education activities selected according to individual needs as determined by medical and physical examinations and tests. Complete freedom in the choice of activities is permitted to men who maintain acceptable standards in health, physical development, and physical efficiency. Among the minimum requirements of the department are good posture, ability to swim, elementary skill in self defense, efficiency in fundamental activities, reasonable skill in at least one individual sport and in one team game.

The following physical education activities are carried on under supervision of the Department: Archery, badminton, baseball, basketball, bowling, corrective exercises, cross country running, dancing, fencing, football, golf, gymnastics, life saving, softball, swimming, tennis, touch football, track and field athletics, tumbling, volleyball, water polo, weight lifting, wrestling. Fees as indicated are required each semester of those who take archery (\$1.50), fencing (\$7.00), golf (\$10.00), and bowling (\$21.00).

The college program of intercollegiate athletics is an integral part of the program of Physical Education. No student is permitted to participate in more strenuous forms of competition without a certificate from the College Physician indicating that the individual is physically fit for such participation.

The student obtains credit in the required courses listed below by participation in activities selected in accordance with the principles set forth in the preceding paragraphs.

1a-1b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

2a-2b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required of Freshmen not taking Military Science. $\frac{1}{2}$ unit. Arranged.

53a-53b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

54a-54b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required of Sophomores not taking Military Science. $\frac{1}{2}$ unit. Arranged.

105a-105b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Junior year. $\frac{1}{2}$ unit. Arranged.

107a-107b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Senior year. $\frac{1}{2}$ unit. Arranged.

WOMEN

Medical and physical examination is given all entering students with subsequent posture tests. Physical activities are allowed or prescribed as the result of these examinations. Participation in a fundamental activity is required each semester of the Freshman year. Students may have freedom of election in other activities in so far as medical and physical examinations warrant, but must include by the end of the Sophomore year one individual sport and one semester of either folk or contemporary dance. The passing of a swimming achievement test is required for graduation. It should be completed by the end of the Sophomore year.

Activity fees are charged for badminton, riflery, and archery (\$1 semester), golf (\$10 semester), riding (\$60 semester), fencing (\$7 semester).

ACTIVITY

Six units of Physical Education Activities are required for graduation. One unit is credited for 11a-b, Fundamentals, which includes courses organized to teach the basic fundamentals of physical activity. The remaining 5 units may be earned by participation in other activities.

FUNDAMENTALS: contemporary dance, swimming, individual gymnastics, group gymnastics.

TEAM SPORTS: basketball, baseball, speedball, hockey, volleyball.

INDIVIDUAL SPORTS: archery, badminton, tennis, golf, riding, riflery, swimming, fencing.

DANCING: contemporary, folk and square.

11a-11b. FUNDAMENTALS. *The Staff.* Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

-12b. SPORTS OR DANCING. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

-63b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

-64b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

-a-115b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Junior year. $\frac{1}{2}$ unit. Arranged.

-a-117b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Senior year. $\frac{1}{2}$ unit. Arranged.

Physics

A minimum concentration program in physics includes 25 units of upper division physics, Mathematics 1, 65, 151, and Chemistry 1. Additional work in physics, mathematics, chemistry, German, engineering drawing, and descriptive geometry is recommended. A minimum concentration program in physics will normally be elected by those who plan to use physics in combination with training in some other field, and who do not plan to do graduate work in physics.

A student who plans to do graduate work in physics will be expected to complete 31 units of upper division physics, Mathematics 1, 65, 151, and not less than six units selected from Mathematics 119, 152, 185, and 210. The student will be expected to establish a good foundation in chemistry and to acquire a reading knowledge of German. Courses in descriptive geometry and engineering drawing are recommended.

All students concentrating in physics will consult with the physics staff about their concentration examination during the first week of their senior year.

1b. INTRODUCTION TO PHYSICAL SCIENCE. *Mr. Fryer*. A non-mathematical course intended for those who wish to obtain a knowledge of the fundamental principles, theories and applications of physics. The lectures will be illustrated by numerous experimental demonstrations and the subject will be developed from the basis of the discrete structure of electricity and matter. Fee \$5.00 each semester. 3 units. *MWF, 10.*

51b. GENERAL PHYSICS. *Mr. Fowler*. A study of the phenomena and laws of mechanics, heat, wave motion, sound, electricity, magnetism, and light. This course is designed to furnish a working knowledge of the basic principles of physics and is planned especially for those students who expect to continue

studies in physics, chemistry, engineering or medicine. Prerequisite, Mathematics 1a-1b preceding or accompanying the course. 4 units. Laboratory fee \$3.00. *TThS*, 8. Laboratory *MTW* or *F*, 1:15-4:05.

110. HEAT AND THERMODYNAMICS. *Mr. Henke*. A course dealing with the principles of thermodynamics and the theory of heat. The first and second laws of thermodynamics and their application to liquids, vapors, and gases will be emphasized. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF*, 11.

113a-113b. MECHANICS. *Mr. Henke*. Kinematics, dynamics, and statics of particles and rigid bodies with applications to problems of physics and engineering. Prerequisite, Physics 51, Mathematics 65. 3 units. *TThS*, 9.

141a, 141b. ELECTRICITY AND MAGNETISM. *Mr. Fryer*. A course in the theory of electricity and electromagnetism. Emphasis will be placed on the fundamental laws of electrostatics and electrodynamics, electrical circuit theory, introductory electromagnetic field theory. Prerequisite, Physics 51, Mathematics 151 preceding or accompanying the course. 3 units. *TThS*, 8.

142a, 142b. ELECTRICAL MEASUREMENTS. *Mr. Fryer*. Laboratory in electrical and electromagnetic measurements. Prerequisite, Physics 141 preceding or accompanying this course. 1 unit. Laboratory fee \$4.00. *T*, 1:15-4:05.

153. OPTICS. *Mr. Fowler*. The fundamentals of geometrical optics. The theory and applications of physical optics with emphasis upon the phenomena of interference, diffraction and polarization of light. Prerequisite, Physics 51, Mathematics 65. 3 units. First semester. *MWF*, 9.

154. OPTICAL MEASUREMENTS. *Mr. Henke*. Experimental study of phenomena of geometrical and physical optics. Laboratory to accompany Physics 153. 1 unit. First semester. Laboratory fee \$4.00. *Th*, 1:15-4:05.

155. ATOMIC STRUCTURE. *Mr. Fowler*. An introduction to modern theories of atomic and nuclear structure, elementary particles, and radiations. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF*, 9.

156. ADVANCED PHYSICS LABORATORY. *Mr. Fryer*. Independent experimental study of selected subjects in modern physics. Prerequisite, approval of instructor. 1 unit. Second semester. Laboratory fee \$4.00. *Th*, 1:15-4:05.

191a, 191b. MATHEMATICAL PHYSICS. *Mr. Fowler*. Application of mathematics to selected subjects in classical and quantum physics. Prerequisite, approval of the instructor. 3 units. *TThS*, 10.

Psychology

Students concentrating in psychology are required to take psychology 54, and 24 units of upper division courses including psychology 194. As a part of the latter requirement, 6 units may be offered from the following courses: Psychology 112, Zoology 121, Government 160, Mathematics 194, Sociology 192. Students should note that some of these courses are not offered every year. Training in zoology, physics, chemistry, French and German is recommended for students planning to do graduate work in psychology. Psychology 101 is prerequisite to all further work in the department with the exception of Psychology 101 and 102. Child Psychology may be taken concurrently with 51b.

51b. INTRODUCTION TO PSYCHOLOGY. *Staff*. Fundamental facts and principles of consciousness and behavior. The relation of the nervous system to mental processes and action. Practical applications in various fields. 3 units. Three sections, *MWF*, 9, 11, and *TThS*, 10. (A section of 51a is offered the second semester, *MWF*, 11; and a section of 51b is offered the first semester, *MWF*, 11.)

54b. LABORATORY PSYCHOLOGY. *Mr. Ellis*. Experimental demonstration of facts and principles studied in Psychology 51. Notes are written up outside of laboratory time. Laboratory fee \$1.50 each semester. 1 unit. Laboratory periods. *M* or *T*, 1:15-3:05.

55b. PSYCHOLOGY WITH APPLICATIONS TO BUSINESS. A course designed primarily for students majoring in economics who do not anticipate taking additional work in psychology. A grounding in pertinent psychological principles is followed by a study of the applications of these principles to employment problems, advertising, market research, efficiency, etc. No prerequisites. Students completing course 55 will be allowed to enter advanced courses in psychology with consent of the instructor. Not open to students taking Psychology 51. 3 units. *MWF*, 11. (Omitted in 1950-51.)

56. PSYCHOLOGICAL STATISTICS. *Mr. Gray*. An introductory course designed to acquaint the student with the statistics most commonly encountered in reports of psychological experiments. Interpretation of results is emphasized over computation. Recommended for psychology majors. No laboratory fee. Students who take Economics 158 may not register for credit. One semester. First semester. *W* or *Th*, 2:15-4:05.

57. PSYCHOLOGICAL STATISTICS. *Mr. Gray*. Sampling statistics with emphasis on the design of experiments. Advanced correlational methods. Training in computation of statistical indices. Prerequisite, Psychology 101. No laboratory fee. Students who take Economics 158 may not register for credit. 3 units. Second semester. Class, *Th*, 1:15; laboratory, *Th*, 2:15-4:05.

103. **INDIVIDUAL DIFFERENCES.** *Mr. Ellis.* A study of the nature and extent of individual differences and their causes as determined by objective methods. Age, sex, and race differences. Genius, subnormality, insanity and criminality. The organization of mind. Applications in various fields are considered briefly. 3 units. First semester. *MWF, 9.*

107. **EDUCATIONAL PSYCHOLOGY.** *Mr. Ellis.* Practical applications of psychology to education. The nature of the learner; intelligence and motivation. Principal features of the learning process. 3 units. First semester. *TThS* second semester, *MWF, 9.*

108. **CHILD PSYCHOLOGY.** A survey of physical and mental growth and development. Particular attention will be given to methods of child training and to the hygiene of growth. 3 units. First semester, *MWF, 10.* Second semester, *MWF, 11.*

117. **PHYSIOLOGICAL AND COMPARATIVE PSYCHOLOGY.** A detailed examination of the physiological mechanisms of behavior in man and animals with emphasis on the nervous system. 3 units. First semester. *TTh, 8* and arranged. (Omitted in 1950-51.)

135. **PERSONALITY ADJUSTMENT.** *Mr. Harsh.* Physiological, social and psychological determinants of personality. Special problems of adjustment and the ways in which these may be resolved. Students who have taken Psychology IV-III may not take this course for credit. 3 units. First semester. *TThS, 10.*

154. **SOCIAL PSYCHOLOGY.** *Mr. Harsh.* Mental processes underlying social order and progress; collective forms of behavior. 3 units. First semester. *MWF, 11.*

156. **MENTAL TESTS.** A study of the principles and methods of mental testing. 3 units. First semester. Laboratory fee \$2.00. Prerequisite, Psychology 101. *TTh, 8*, and laboratory *F, 2:15-4:05.*

158. **MENTAL TESTS PRACTICUM.** Diagnostic use and clinical interpretation of psychological tests. Prerequisite, Psychology 156 and permission of instructor. No laboratory fee. 3 units. Second semester. *F, 2:15* and arranged.

161. **ABNORMAL PSYCHOLOGY.** *Mr. Harsh.* The classification and symptomatology of mental disorders; contributions to the understanding of the normal personality; psychological concepts underlying diagnosis, therapy and causation. 3 units. Second semester. *TThS, 10.*

188. **EXPERIMENTAL PSYCHOLOGY.** *Mr. Harsh.* Lectures and discussions on the principles of scientific method used in psychological investigations. Leading experiments in the history of psychology. Permission of the instructor required for registration. 3 units. Second semester. *TTh, 8* and arranged.

4. SENIOR READING COURSE. *Mr. Ellis*. A course designed to supplement and integrate the different courses offered to meet the concentration requirement in psychology and to prepare students for the comprehensive examination. Required of seniors who are concentrating in psychology. 2-4 units. Either semester. *T*, 3:15 and arranged.

AVAILABLE AT SCRIPPS COLLEGE

110. GROWTH AND DEVELOPMENT OF THE CHILD. *Mrs. Jones*. Prerequisite, Elementary Psychology. Year course. *MWF*, 11.

112. CHILD STUDY IN THE NURSERY SCHOOL. *Mrs. Jones*. Prerequisite, Elementary Psychology and IV-110. Year course. *MW*, 2:15 and arranged hours in the Nursery School.

114. NURSERY SCHOOL PROCEDURE. *Mrs. Jones*. Prerequisite, IV-112. Year course. *MW*, 3:15-4:05 and arranged hours in the Nursery School.

116. PSYCHOLOGY OF EXCEPTIONAL CHILDREN. Prerequisite, Elementary Psychology. Second semester. *TTh*, 10 and arranged hour.

19. HUMAN PSYCHOBIOLOGY. *Mr. Caster*. Year course. *TThS*, 8.

Religion

Students planning to concentrate in religion must take the following lower division courses or their equivalents: Religion 1, 2, and 65; History 1, and Philosophy 55. Twenty-four hours of upper-division work, of which eighteen must be in the field of religion, are required. Among the minimum of fifteen the following, totaling fifteen hours, are considered essential: 101, 107, 141, and 191. Six units of upper-division courses may be taken in related fields of English, government, history, philosophy, psychology, and sociology.

Students transferring to Pomona at the beginning of the Junior year may concentrate in religion if lower division requirements have been met prior to entrance or can be met during the Junior year.

THE RELIGION OF THE OLD TESTAMENT. *Staff*. A course designed as a general introduction to Old Testament ideas. The developing beliefs and practices of Hebrew religion will be considered in their historical sequence, beginning with the patriarchal period and ending with Judaism of the second century before Christ. 3 units. First semester. Four sections. *MWF*, 8, 9; *ThS*, 8, 10.

THE RELIGION OF THE NEW TESTAMENT. *Staff*. A course designed as a general introduction to New Testament religious ideas. Attention will first be given to the teaching of Jesus, followed by a study of the message of Paul and a consideration of the developing religious views of the early Christian community. 3 units. Second semester. Four sections. *MWF*, 8, 9; *TThS*, 8, 10.

65a, 65b. GREAT PERSONALITIES IN CHRISTIAN HISTORY. *Mr. von Rohr*. A survey of the development of Christian beliefs as reflected in the thought of some of the outstanding representatives of the Christian tradition. Arrangements for persons studied during the first semester will be Paul, Augustine, Francis of Assisi, and Thomas Aquinas, and during the second semester Erasmus, Luther, Calvin, George Fox, and John Wesley. 3 units. *MWF, 10.*

101. PHILOSOPHY OF RELIGION. *Mr. von Rohr*. A course for the general student, aiming to clarify problems of religion confronting the modern mind. Discussion will center around such topics as the existence and nature of God, the nature of man, the problem of evil, and the questions of prayer, immortality. 3 units. First semester. *TThS, 9.*

102. CONTEMPORARY RELIGIOUS THOUGHT. *Mr. Cuninggim*. A systematic investigation of some of the significant movements in present-day Christian thinking in both Europe and America. Major writings, reflective of various points of view, will be read and discussed. 3 units. Second semester. *TThS, 10.*

107. LIFE AND TEACHINGS OF JESUS. *Mr. Cuninggim*. A specialized study of the contents of the four Gospels. Beginning with an analysis of the available records and their reliability, attention will be given to the facts and theories concerning the life of Jesus, followed by a consideration of the content and purpose of his teaching. 3 units. First semester. *MWF, 11.*

141. CHRISTIAN ETHICS. *Mr. Cuninggim*. A general introduction to the ethical principles of the Hebrew-Christian tradition, studied in the light of their historical development. 3 units. First semester. *TThS, 10.*

142. CHRISTIANITY AND MODERN SOCIETY. *Mr. Cuninggim*. A study of the tensions which Christianity faces in its application to problems of the political, economic, and social orders. Roles of both the Christian individual and the Christian group will be considered. 3 units. Second semester. *TThS, 10.*

160. CATHOLICISM AND PROTESTANTISM. *Mr. von Rohr*. A study of the significant similarities and differences in the two major strains of the Christian tradition. Attention will first be given to an understanding of Roman Catholic beliefs and practices, followed by a study of Protestantism in both its original and modern forms. 3 units. Second semester. *MWF, 11.*

170. PSYCHOLOGY OF RELIGION. *Mr. Cuninggim*. An investigation of the varieties of religious experience in the light of the conclusions of modern psychology. Both individual and group religious behavior will be studied. 3 units. Second semester. *MWF, 2:15.* (Omitted in 1950-51.)

191a, 191b. ADVANCED READINGS IN RELIGION. *Staff*. An independent reading program for students concentrating in the field of religion. 3 units. Arranged by permission.

AVAILABLE AT SCRIPPS COLLEGE

IV-140. LIVING RELIGIONS OF THE WORLD. *Mr. Hogue*. Year course. Open to sophomores by permission. *TTh, 8,* and arranged hour.

Romance Languages and Literatures

Concentration in the Romance Languages is designed for students who are planning to teach one or more of the group, or to enter some form of foreign service, or for those who wish to develop an appreciation of the cultures involved. Preparatory work in Latin is recommended and will be found very helpful. A reading examination administered by the department is a normal prerequisite for admission to courses on literature.

A student planning to concentrate in a single Romance Language is required to take at least 24 units in courses numbered over 100 in the language selected. Work in this language should, if possible, have been started before entering college.

For a concentration in a combination of the Romance Languages, 36 hours of upper division work are required.

Students who expect to teach one of the Romance Languages are urged to take work in at least one other language of the group.

Related subjects recommended for students concentrating in the department: English Literature, Comparative Literature, History, Philosophy, History of Art, Music Appreciation.

FRENCH

Courses for concentration: Any courses numbered over 100. Of the courses in the literature, French 120 should be taken first.

1-1b. **ELEMENTARY.** *Mr. Crowell.* Essentials of grammar; dictation and speaking. A cultural approach with the emphasis on the acquisition of reading ability. Extensive outside readings in addition to the work in class. This course is the normal preparation for French 51; however superior achievement may admit to French 81. Students with a special interest in conversation should enroll concurrently in French 2. Three units. Two sections. *MWF, 10; TThS, 9.*

2, 2b. **ELEMENTARY CONVERSATION.** A course in spoken French to accompany French 1 and open only to students enrolled in that course, except with the consent of the instructor. Outside preparation will be kept to a minimum. One unit. *WF, 11.*

3a-51b. **INTERMEDIATE.** *Mr. Crowell.* A course designed for those students who have completed two years of high school French, or a three-unit year course in college. Grammar review; intensive class reading; extensive outside reading assignments. Superior achievement in this course may admit to upper division work. 3 units. *MWF, 9.*

6a, 61b. **INTERMEDIATE CONVERSATION.** A course in spoken French stressing fluency and accuracy through the use of dialogues, reports and recording machines. Outside preparation will be kept to a minimum. Students enrolled

in this course must also be enrolled in French 51 or a higher course, must have the consent of the instructor. 1 unit. *WF*, 1:15.

81a-81b. ADVANCED INTERMEDIATE. *Miss Obrecht*. A course designed for students who have completed French 1 and 51, or for freshmen who have had three or more years of high school French. Conducted in French as far as possible. Composition; conversation; extensive reading of modern texts; individual outside readings with written reports in French. 3 units. *MWF*,

120a-120b. SURVEY OF FRENCH LITERATURE AND CIVILIZATION. *Miss Obrecht*. Outline of the development of French literature and culture. Readings and selections to give the student a comprehensive view of the history of French literature and life of the French. 3 units. *MWF*, 10.

124a-124b. FRENCH LITERATURE FROM ROUSSEAU TO ZOLA. (Omitted in 1950-51.) For 1950-51, Pomona students will find the work of this course available in Scripps College French I-124. 3 units. *TTh*, 1:45-3:15.

125a-125b. FRENCH LITERATURE FROM ZOLA TO THE PRESENT. The major authors and works of Naturalism and Symbolism and the present century will be studied in relation to the background of the period—political, economic, artistic. The development of thought will also be considered. Alternates with French 124. (Omitted in 1950-51.)

141a-141b. ADVANCED CONVERSATION AND COMPOSITION. *Miss Obrecht*. This course conducted entirely in French. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of correct pronunciation and intonation. Open to students who have completed French 81 or equivalent. Alternates with French 153. 3 units. *TThS*, 8.

ITALIAN

61a-61b. ELEMENTARY. *Mr. Crowell*. A rapid survey of the grammar with special emphasis on the pronunciation. Extensive reading of modern prose. A thorough grounding in French, Spanish or Latin is strongly recommended. 3 units. *TThS*, 10.

SPANISH

Courses for concentration: Any courses numbered over 100. Of the courses on the literature, Spanish 113, 114 should be taken first. For concentration in the field of Latin American Civilization see page 75, the concentration on International Relations, page 73.

11a-11b. ELEMENTARY. *Miss Husson*. Essentials of grammar; pronunciation; writing and speaking; class readings of easy modern texts; extensive outside readings adapted to the needs and interests of the individual student. This course is the normal preparation for Spanish 71. 3 units. *MWF*, 8.

2a, 12b. **ELEMENTARY CONVERSATION.** *Miss Husson, Mr. Crowell.* Emphasis on the spoken language from the beginning of the course. Drill in pronunciation; class conversation based on a variety of reading assignments. Completion of both Spanish 11 and Spanish 12 prepares for Spanish 91; however, superior achievement may admit to upper division courses. 3 units. *MWF, 11.* (Omitted in 1950-51.)

2a-71b. **INTERMEDIATE.** *Miss Husson.* A course designed for students who have completed two years of high school Spanish, or a three-unit year course in college. Conducted in Spanish, as far as possible. Grammar review; extensive reading of modern texts; outside readings; written reports in Spanish. Normally followed by Spanish 91, but superior achievement may permit to upper division work. 3 units. *MWF, 10.*

2a-91b. **ADVANCED INTERMEDIATE.** *Miss Husson.* A course designed for students who have completed Spanish 11 and 12, Spanish 71, or for freshmen who have had three or more years of high school Spanish. Conducted in Spanish as far as possible. Composition; conversation; extensive reading of modern texts; individual outside readings with written reports in Spanish. 3 units. *TThS, 9.*

3. **MODERN SPANISH THEATRE.** *Miss Husson.* Study of the works of the leading Spanish playwrights from 1800 to the present time. Reading of certain plays in class; reports on individual outside readings. Conducted in Spanish. 3 units. First semester. *TThS, 10.*

4. **MODERN SPANISH NOVEL.** *Miss Husson.* Study of the principal Spanish prose works from 1800 to the present time with emphasis on the novel. Extensive outside readings; written reports. Conducted in Spanish. 3 units. Second semester. *TThS, 10.*

12a-151b. **ADVANCED CONVERSATION AND COMPOSITION.** *Mr. Crowell.* A course conducted entirely in Spanish. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of correct pronunciation and intonation. Comprehension of the spoken language developed in part through participation in the class activities of native speakers. Open to students who have completed Spanish 91 or equivalent. 3 units. *MWF, 10.*

2a, 171b. **SPANISH LITERATURE FROM 1140 TO 1650.** (Omitted in 1950-51.) The work of this course is available to Pomona students in Spanish I-155 at Scripps College. 3 units. *MWF, 11.*

2a, 173b. **MEXICAN LITERATURE.** *Mr. Crowell.* Class study of selected works from colonial times to the present day. Extensive outside readings in literature and on the history and culture. Individual written reports in Spanish. First semester: The Colonial Period and the Nineteenth Century. Second semester: Contemporary Mexico from 1910 on. 3 units. Alternates with 175. *TTh, 2:15-3:30.*

175a, 175b. SPANISH AMERICAN LITERATURE. *Mr. Crowell*. Class study; outstanding literary works of Hispanic South America. Extensive out- readings; individual reports in Spanish. 3 units. Alternates with 173. (Omit in 1950-51.)

AVAILABLE AT SCRIPPS COLLEGE

I-155. SURVEY OF SPANISH LITERATURE. *Mrs. Lamb*. Year course. *MWF*,

I-156. LATIN AMERICAN THEATRE. *Mrs. Lamb*. Year course. *MW*, 2:15-3:

* * *

In the Romance field the graduate work offered under the Claremont Graduate School centers on the following periods of the literature: French: Old French, 17th Century, 18th Century, 19th Century, Contemporary Period. Spanish: Pre-Golden Age, Golden Age, Spanish and Spanish American 19th Century, and Contemporary Period.

Russian

1a-1b. ELEMENTARY RUSSIAN. *Mr. Ilyin*. Essentials of grammar, pronunciation, constant exercises in reading and writing, practice in speaking. Individual assignments in reading, writing and speech which will correspond to each student's needs and interests. 3 units. *TT&S*, 9.

Sociology

Requirements for concentration: Sociology 51, normally taken in the Sophomore year, and 24 units of upper division courses in sociology. However, these 24 units may be chosen from the following: Economics 111, Government 157, Psychology 154.

Recommended courses: Students concentrating in sociology will find helpful to take as many of the following courses as possible: Economics 111 and 57, Government 51 or Political Economy 1, History 1, Psychology 154, Religion 142.

Lower Division distribution: Sociology 51 and 52 constitute the integrative year course for students who expect to take only one year of sociology. For those planning more extensive work in sociology, Sociology 51 and any two higher numbered semester courses will meet the distribution requirement.

51. INTRODUCTORY SOCIOLOGY. *Staff*. Man's cultural heritage and collective behavior. The origin, structure, and functioning of human groups, and the role in personality and cultural development. The principal social processes such as competition, conflict, cooperation, and assimilation. Results of social change. Not open to Freshmen. 3 units. First semester. Four sections. *TT&S*, 8, 9; *MWF*, 11, 1:15.

2. **SOCIAL PROBLEMS.** *Mr. Scaff.* A survey of the major problems of present-day society related to individual, family, community, and world disorganization. Typical problems studied are crime, delinquency, alcoholism, marital adjustment, race antagonism, labor relations, migration, and population pressures. Intended to follow Sociology 51 for students who plan to take only one year of sociology. Not recommended for students who intend to take several specialized courses such as Race Relations, Criminology, etc. Prerequisite, Sociology 51. 3 units. Second semester. Two sections. *TThS*, 8, 9.

12. **CULTURAL ANTHROPOLOGY.** *Mr. Baber.* (a) Chronological Approach: the emergence and dispersion of man, his earliest fossil and cultural remains, and the development of his cultural patterns from Stone Age to Iron Age. The rise of language, writing, and the basic economic, political, and social institutions. (b) Areal Approach: a comparison of human behavior in widely dispersed contemporary primitive cultures, to reveal the constant as well as the variable features of human society. Prerequisite, Sociology 51. 3 units. First semester. *MWF*, 9.

16. **SOCIAL WELFARE.** *Mr. Scaff.* A survey of the various fields of social work and the major techniques and theories involved. Includes a description and analysis of case work, family welfare, child welfare, child guidance clinics, school social work, probation supervision, medical and psychiatric case work, group work, public welfare, and community organization. Visits to selected agencies. Prerequisite, Sociology 51. 3 units. First semester. *MWF*, 8.

17. **CRIMINOLOGY AND PENOLOGY.** *Mr. Baber.* Types of criminal behavior. The making of the criminal; causative factors. Changing interpretations of crime. Methods of dealing with criminals through the police, courts, prisons, probation, and parole. Special treatment of juvenile delinquents; preventive measures. Prerequisite, Sociology 51. 3 units. Second semester. Two sections. *MWF*, 9, 11.

19. **MARRIAGE AND THE FAMILY.** *Mr. Baber.* Factors involved in mate selection and the husband-wife and parent-child relationships. Adjustment of marriage and family patterns to our rapidly changing culture. Analysis of the factors promoting family disorganization; measures seeking to conserve the social values of family life. Open to Juniors and Seniors only. 3 units. First semester. (Omitted in 1950-51.)

20. **RACE RELATIONS.** *Mr. Baber.* Concepts of race and culture. The nature of race contact and the development of race consciousness and conflict patterns. The experience of several nations with racial minorities, with emphasis on American experience with Negroes, Mexicans, and Orientals. Some causes and trends of prejudice and discrimination. Prerequisite, Sociology 51. 3 units. Second semester. *MWF*, 1:15.

21. **POPULATION AND MIGRATION PROBLEMS.** *Mr. Scaff.* Factors influencing population growth or decline. The social and economic effects of an increas-

ing, static, or declining population. The significance of the rates of increase in the different racial, economic, or social elements of the population. Suggested policies for controlling the quantity and quality of the population. Trends of internal migration, especially to the Pacific Coast. Prerequisite, Sociology 51, or sufficient background in the other social sciences to satisfy the instructor. 3 units. First semester. *MWF*, 8. (Alternates with 112. Omitted in 1950-51.)

112. THE AMERICAN COMMUNITY. *Mr. Scaff*. An analysis of modern American urban communities in contrast with rural communities. Urban ecology applied to the Los Angeles area. The community's class structure and institutional composition. Community planning. Approximately half the course devoted to lectures and discussions, half to field investigation and projects in the local area. Prerequisite, Sociology 51 and instructor's permission. 3 units. Second semester. (Offered in alternate years. To be given again in first semester, 1952-53.) *MW*, 2:15-3:55.

152. SOCIAL CONTROL. *Mr. Baber*. An analysis of human nature and social origin. The evolution of social control and its increasing complexity due to the acceleration of social change in modern culture. Society's methods of creating and maintaining its social patterns, through law, public opinion, propaganda, education, religion, rewards, etc. Individual control versus social control. Open to Juniors and Seniors only. Prerequisite, Sociology 51. 3 units. Second semester. *MWF*, 1:15. (Alternates with 110. Omitted in 1950-51.)

153. THEORIES OF SOCIAL REFORM. *Mr. Scaff*. A study of various proposals for social reconstruction including: the Utopians, Marxian Socialism, Fabian Socialism, Syndicalism and Guild Socialism. An investigation of contemporary experiments in social reorganization: the British Labor Movement, German Nazism, Italian Fascism, Russian Communism, and the Cooperative Movement at home and abroad. Prerequisite, Sociology 51. Open to Juniors and Seniors only. 3 units. First semester. *MWF*, 10.

154. DEVELOPMENT OF SOCIAL THOUGHT. *Mr. Scaff*. A brief survey of the growth of social thought through the ages, noting contributions by primitive cultures, ancient civilizations, and the middle ages. The transition from social thought to sociology. A study of the leading sociologists and their chief contributions to an understanding of society. Comparison of different schools of thought and their methods of interpreting social data. Prerequisite, Sociology 51. Open to Juniors and Seniors only. 3 units. Second semester. *MWF*, 10.

191a-191b. SOCIAL INVESTIGATION. *Mr. Baber*. Methods of investigation and research as applied to both individual and group work. The effective presentation of social data. Observation and analysis of the work of various social agencies and programs. Individual projects for some; supervised field experience (in selected agencies) for others, according to the interests and needs of the student. Open only to seniors with the written permission of the instructor. 3 units. Arranged.

Speech and Dramatics

Requirements for concentration:

Lower Division Courses: Speech and Dramatics 32, 51 (at least two units), 57, 61 (six units), and History 1, in fulfillment of which requirements transfer students may offer equivalent courses pursued at other colleges.

Upper Division Courses: Speech and Dramatics 134 (six units), 155 (six units), 160, and Scripps II-150 or English 104b and 192 or Comparative Literature 148a, 148b or 181a, 181b, or Speech and Dramatics 112a-112b. Fluency in at least one modern foreign language (preferably French) is recommended.

In the comprehensive examination the books on a supplementary reading list will be included.

In addition to the comprehensive examination, a demonstration of creative ability in the field of concentration is required.

In addition to the required work in the Speech and Dramatics concentration, the following offerings are suggested as suitable electives, the choice among them depending on the student's particular interests: *Lower Division:* Art 43b and 51a-51b; Music 53a-53b; Speech and Dramatics 52a-52b and 53a, 53b; Scripps II-80; English 50, 58, 64. *Upper Division:* Art 105a-105b; Music 13a-103b; Physical Education 130; Spanish 113; French 120a-120b; Scripps 51; Speech and Dramatics 131a-131b; English 103, 111, 151.

32b. VOICE AND DICTION. *Mr. Scott.* Study of the mechanics of voice production and of the elements of English phonetics. Practice designed to develop good voice and diction. Permission of the instructor required for registration. 2 units. *MW*, 11.

51, 51b. PLAY PRODUCTION. *Mrs. Allen.* Directed study in play production, both in acting and in the technical problems of the stage. One unit of credit may be granted for either fifty hours of rehearsal time under direction, or any hours of technical work under direction, or for fifty hours of rehearsal and technical work combined. Not more than two units of credit may be granted in any one year. A total of eight units of credit may be applied toward graduation.

52b. FUNDAMENTALS OF SPEECH. *Mr. Scott.* Exercise in voice development and platform deportment. Training in analysis of subjects, selection and arrangement of material, psychological adaptation of material and treatment to specific audiences. 2 units. *MW*, 9.

53, 53b. PRINCIPLES OF INTERPRETATIVE READING. *Mr. Scott.* Study of the technique of effective oral interpretation of literature. Application of this technique in the reading of various literary types. 2 units. *TTh*, 10.

55a, 55b. ARGUMENTATION AND DEBATE. *Mr. Scott.* Study of the principles of argumentation and practical application of these principles in class debate. Debate subjects for the year analyzed and debated. 2 units. *Th*, 2:15-3:5

61a, 61b. CHARACTER PRESENTATION IN DRAMATIC LITERATURE. *Mrs. Allen.* An approach to dramatic literature through the actor's art. A study of theories of acting and principles of stage behavior. Pantomime and improvisation develop concentration, observation, imagination, coordination, and confidence. Scenes from plays, both classic and modern, will be studied with emphasis on interpretation. Permission of instructor required. 3 units. *TThS*, 10.

112a-112b. PLAYWRITING. *Mrs. Allen.* The theory of playwriting with supervised practice in this technique. A study will be made of the structure and style of significant plays for their light on the problems of the beginning playwright. Permission of instructor required. Alternates with Speech and Dramatics 160. 3 units. *TThS*, 9. (Omitted in 1950-51.)

131a-131b. ADVANCED SPEECH. *Mr. Scott.* Training in the construction and delivery of formal addresses. Prerequisite, Speech and Dramatics 52 or equivalent. 2 or 3 units. *TTh*, 9.

134a, 134b. READING OF DRAMATIC LITERATURE. *Mr. Scott.* Intensive study of a limited number of standard plays, with emphasis on dramatic value, character and plot. Interpretative reading of these plays in class. Required programs before the class. Prerequisite, Speech and Dramatics 53 or equivalent. 3 units. *MWF*, 10.

160a-160b. THEATRE PRACTICE. *Mrs. Allen.* A survey of historical backgrounds of stage forms and of contemporary production methods. A study of theories, problems, and techniques of production applied to plays of various types. Analysis of problems confronting the theatre worker, in acting, direction, design, criticism, and management. Practical experience in directing a short play. Advanced problems in the analysis and presentation of character with concentration on *styles* of acting. Representative plays of various periods (Greek, Elizabethan, Restoration, Eighteenth Century, Modern) will be used for study and practice. 3 units. Alternates with Speech and Dramatics 112. *TThS*, 9.

INTRODUCTION TO DRAMA. For description see English 57.

SHAKESPEARE. For description see English 155a, 155b.

AVAILABLE AT SCRIPPS COLLEGE

II-150. DEVELOPMENT OF THE THEATRE AND THE DRAMA. Year course. *MWF*, 11.

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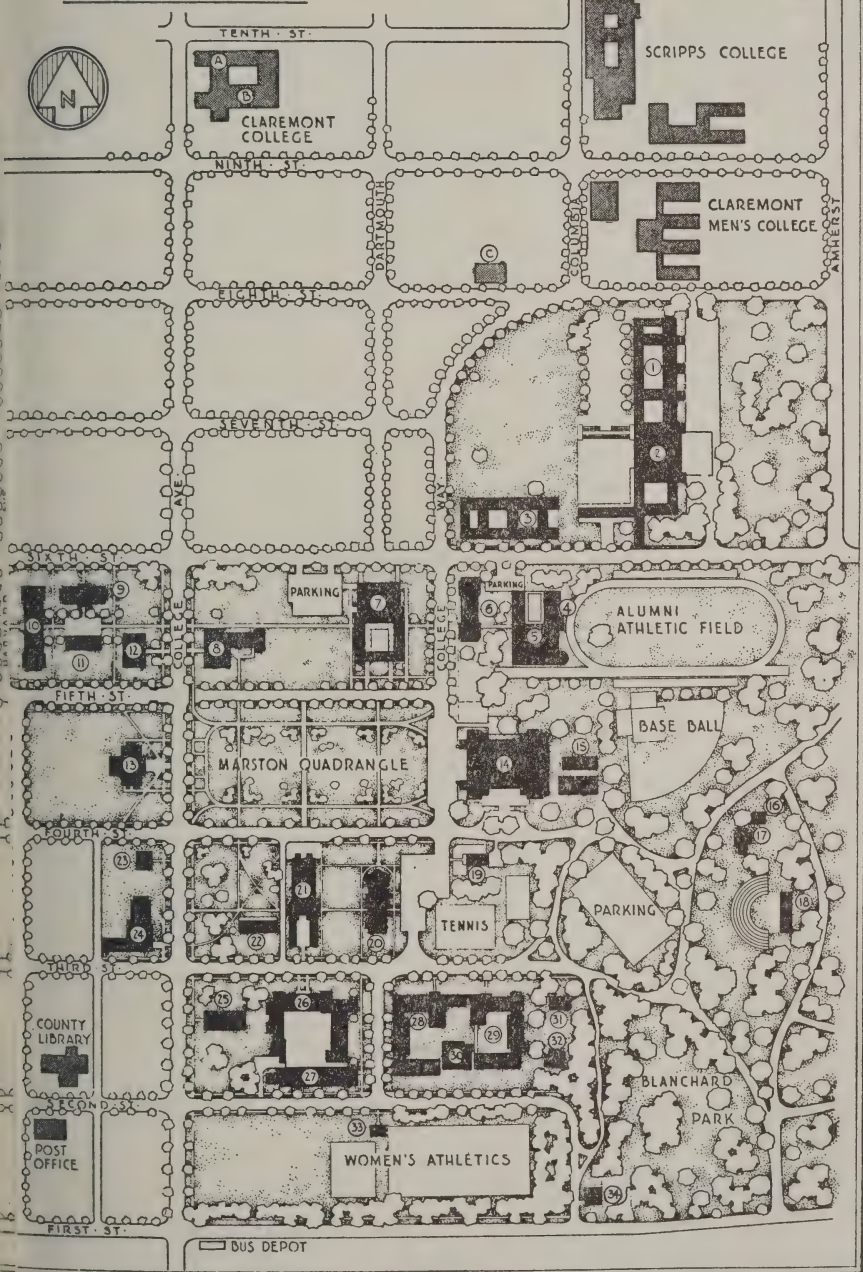
POMONA COLLEGE CAMPUS PLAN

(See map on opposite page)

1. Eli P. Clark Hall, residence for men.
 2. Frary Hall, central dining hall for men.
 3. Eli P. Clark Hall, residence for men.
 4. Memorial Training Quarters for men.
 5. War Memorial Gymnasium and Swimming Pool.
 6. Smiley Hall, residence for men.
 7. Edmunds Union, including student offices, cooperative store, ballroom and lounges.
 8. Holmes Hall, classrooms and assembly hall.
 9. Crookshank Hall, botany, biology, and zoology laboratories.
 10. Mason Hall, chemistry and geology laboratories.
 11. Harwood Hall, department of psychology.
 12. Pearsons Hall, physics laboratory, mathematics department.
 13. Carnegie Library.
 14. Mabel Shaw Bridges Auditorium, great auditorium seating 2600, operated by Claremont College in behalf of the Associated Colleges.
 15. Renwick Gymnasium.
 16. Seaver Laboratory, containing classrooms and library for the department of astronomy.
 17. Frank P. Brackett Observatory.
 18. Open-Air Theatre.
 19. Replica of original home of Pomona College.
 20. Sumner Hall, administration and classroom building.
 21. Mabel Shaw Bridges Hall of Music, assembly hall for recitals and church services; music studios and practice rooms.
 22. Rembrandt Hall, art studios.
 23. President's House.
 24. Claremont Inn, guest house for college and community, private and public dining rooms.
 25. Baldwin House, residence for men.
 26. Harwood Court, residence hall for women.
 27. Aurelia Squier Harwood Memorial Dining Hall for women.
 28. Della Mulock Mudd Hall, residence for women.
 29. Florence Carrier Blaisdell Hall, residence for women.
 30. Jessie E. Gibson Dining Hall for women.
 31. Maison Française, residence for women majoring in French.
 32. Casa Española, residence for women majoring in Spanish.
 33. Field House for women's athletics.
 34. Heating Plant for the Associated Colleges.
- A. Business Office for the Associated Colleges at Claremont.
 - B. Library of Claremont Graduate School.
 - C. Dispensary, office of Physician serving the Associated Colleges. Infirmary for the Associated Colleges is located on Amherst Avenue north of Foothill Blvd.

POMONA COLLEGE

- CAMPUS PLAN -



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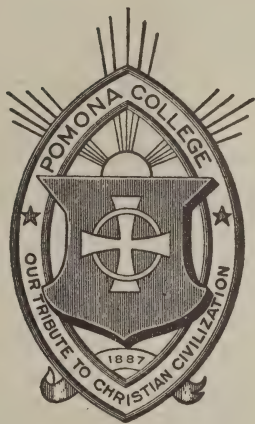
APRIL, 1951

No. 8

PRINTED IN THE UNITED STATES OF AMERICA

Annual Catalog

1951-1952



Pomona College

CLAREMONT, CALIFORNIA

CALENDAR FOR 1951

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CALENDAR FOR 1952

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COLLEGE CALENDAR FOR 1951-52

FIRST SEMESTER

SEPTEMBER 21, FRIDAY	Residence halls open for new students on 12 noon Meeting of Joint Committee
SEPTEMBER 21-24	Program for new students
SEPTEMBER 22, SATURDAY	Faculty Meeting, 10 a.m.
SEPTEMBER 24, MONDAY	Conference Day and Registration for new students
SEPTEMBER 25, 26 TUESDAY AND WEDNESDAY	Registration for returning students. Residence halls open for returning students
SEPTEMBER 27, THURSDAY	First semester classes begin, 8 a.m. Opening Convocation, 11 a.m.
OCTOBER 11, THURSDAY	Last day for entering courses
OCTOBER 11, THURSDAY	Founders Day, Flame Ceremony, 11 a.m.
NOVEMBER 5, MONDAY	First low grade report due
NOVEMBER 8, THURSDAY	Final day for withdrawal from classes without penalty
NOVEMBER 21, WEDNESDAY	Thanksgiving recess begins, 9:30 p.m.
NOVEMBER 26, MONDAY	Thanksgiving recess ends, 8 a.m.
DECEMBER 10, MONDAY	Second low grade report due
DECEMBER 15, SATURDAY	Christmas vacation begins at noon
JANUARY 3, THURSDAY	Christmas vacation ends, 8 a.m.
JANUARY 26, SATURDAY	Last day of classes
JANUARY 28, MONDAY	Final examinations begin
FEBRUARY 6, WEDNESDAY	Final examinations end
FEBRUARY 9, SATURDAY	First semester ends

COLLEGE CALENDAR FOR 1951-52

SECOND SEMESTER

FEBRUARY 11, MONDAY	Opening day for classes at Scripps College, Pomona students enrolled in Scripps courses are expected to attend.
FEBRUARY 12, TUESDAY	Registration for Juniors and Seniors
FEBRUARY 13, WEDNESDAY	Second semester classes begin, 8 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 14, THURSDAY	Opening Convocation, second semester, 11 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 27, WEDNESDAY	Last day for entering courses
MARCH 15, SATURDAY	Matriculation Day
MARCH 24, MONDAY	First low grade report due
MARCH 26, WEDNESDAY	Final day for withdrawal from classes without penalty
APRIL 5, SATURDAY	Spring vacation begins, noon
APRIL 14, MONDAY	Spring vacation ends, 8 a.m.
MAY 3, SATURDAY	Second low grade report due
MAY 24, SATURDAY	Last day of classes for Seniors
MAY 30, FRIDAY	Memorial Convocation, 5 p.m.
MAY 31, SATURDAY	Last day of classes
JUNE 2, MONDAY	Final examinations begin
JUNE 8, SUNDAY	Associated Colleges Baccalaureate
JUNE 11, WEDNESDAY	Final examinations end
JUNE 14, SATURDAY	Alumni Day
JUNE 15, SUNDAY	Commencement
JUNE 19, THURSDAY	Scholarship Committee Meeting
JUNE 20, FRIDAY	Joint Committee Meeting

BOARD OF TRUSTEES

OFFICERS

Rudolph J. Wig, *President*
Arthur J. McFadden, *Vice-President*
Paul Fussell, *Vice-President*

TERM OF OFFICE EXPIRES JUNE, 1951

William B. Himrod, <i>Hollywood</i>	Yale B. Griffith, <i>Santa Barbara</i>
Arthur J. McFadden, <i>Santa Ana</i>	E. Wilson Lyon, <i>Claremont</i>
Charles E. Donnelly, <i>Los Angeles</i>	James W. Fifield, Jr., <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1952

Willis H. Merrill, <i>Long Beach</i>	Seeley G. Mudd, <i>San Marino</i>
George L. Eastman, <i>Hollywood</i>	Rudolph J. Wig, <i>San Marino</i>
Edwin F. Hahn, <i>Pasadena</i>	Frederick S. Bale, <i>Pasadena</i>

TERM OF OFFICE EXPIRES JUNE, 1953

George S. Sumner, <i>Claremont</i>	Mark H. Harrington, <i>Pasadena</i>
Arthur M. Dole, <i>Pomona</i>	Morris B. Pendleton, <i>San Marino</i>
Mrs. Victor Montgomery, <i>Beverly Hills</i>	George R. Martin, <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1954

Fred W. Smith, <i>Ojai</i>	Roy E. Thomas, <i>Los Angeles</i>
Elmo H. Conley, <i>Pasadena</i>	Paul Fussell, <i>Pasadena</i>
William A. Johnson, <i>San Marino</i>	Robert H. Craig, <i>Palos Verdes Estates</i>

TERM OF OFFICE EXPIRES JUNE, 1955

Frank R. Seaver, <i>Los Angeles</i>	George W. Bryant, <i>San Marino</i>
Robert P. Jennings, <i>Sierra Madre</i>	Carl I. Wheat, <i>Washington, D. C.</i>
Paul S. Armstrong, <i>Los Angeles</i>	Herbert S. Rempel, <i>Pasadena</i>

HONORARY MEMBERS

Donald G. Aplin, <i>Highland</i>	Luther Freeman, <i>Claremont</i>
William S. Mason, <i>Pasadena</i>	Mary McLean Olney, <i>Berkeley</i>
Ernest E. Jones, <i>Claremont</i>	David P. Barrows, <i>Berkeley</i>

Charles Clark Eversole, *La Canada*

EX-OFFICIO MEMBERS

Managing Director, Claremont College
President of the Alumni Association
President of the Women's Campus Club
President of the Pomona College Associates

FORMER PRESIDENTS OF THE COLLEGE

Cyrus G. Baldwin, 1890 - 1897	Franklin L. Ferguson, 1897 - 1901
George A. Gates, 1901 - 1910	James A. Blaisdell, 1910 - 1928
Charles K. Edmunds, 1928 - 1941	

GENERAL ADMINISTRATION

1951 - 1952

WILSON LYON

President

209 Sumner Hall

B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; D.Litt., Occidental College.

UL H. BURTON

Controller

Harper Hall

B.A., Western Reserve University.

ILLIAM V. SHANNON

Treasurer

Harper Hall

B.S., Virginia Military Institute.

ARJORIE B. WOODFORD

Assistant Treasurer

Harper Hall

B.A., Pomona College; M.A., Columbia University.

ENN V. FULLER

Bursar

Harper Hall

B.A., Ohio State University.

LEN F. HAWLEY

Director of Alumni and Public Relations

203 Sumner Hall

B.A., Pomona College; Graduate Student, Harvard University.

ILLIAM L. WHEATON

Alumni Secretary

212 Sumner Hall

B.A., Pomona College; M.A., New York University.

ILLIAM B. HIMROD

Assistant to the President

203 Sumner Hall

B.A., Pomona College. Graduate Student, University of Southern California.

IN F. MOULDS

Assistant to the President

200 Sumner Hall

Ph.B., University of Chicago.

ONES M. JOHNSON

Executive Secretary to the President

209 Sumner Hall

N. T. NIDER

Social Director, Women's Campus

Harwood Court

B.A., Fresno State College; M.A., Columbia University.

EDWIN ALLEN PHILLIPS

Social Director, Men's Cam

Eli P. Clark H

B.A., Colgate University; M.A., Ph.D., University of Michigan.

FRANCES G. BARBEY

Head Resident, Blaisdell and Mudd H

Mudd H

B.A., Reed College; M.A., Teachers College, Columbia University.

MAY C. FRANK

Director of Residence H

Mudd H

B.S., Columbia University; M.S., Iowa State College.

LUCILLE GRAMSE MCCARTHY

Director of Dining H

Frary H

B.S., M.S., Kansas State College of Applied Science.

H. MAX HUGHS

Superintendent of Buildings and Group

987 Dartmouth Ave

The Faculty

Date denotes beginning of original term of service

ADMINISTRATIVE OFFICERS

JAH WILSON LYON 345 College Ave.
President, 1941.

B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; Litt.D., Occidental College.

NCIS RAYMOND IREDELL 1060 College Ave.
Dean of the Faculty, and Professor of Philosophy on the Robert C. Denison Foundation, 1925.

B.A., Pomona College; M.A., Ph.D., Harvard University.

EDWARD SANDERS 739 Harvard Ave.
Dean of Students and Dean of Admissions, 1942.
B.A., Hendrix College; M.A., Ph.D., Columbia University.

ELTON L. BEATTY 246 E. Seventh St.
Dean of Men, 1949.
B.A., University of Tennessee; M.A., Cornell University; Doctoral Candidate, Stanford University.

B. WALTON 136 E. Seventh St.
Dean of Women on the Martha N. Hathaway Foundation, 1949.
B.A., Swarthmore College; M.A., Brown University; Ph.D., University of Pennsylvania.

MARGARET MAPLE 4326 Via Padova
Registrar, 1940.
B.A., Pomona College.

WID W. DAVIES 452 St. Bonaventura
Librarian, 1947.
B.A., University of California at Los Angeles; M.A., University of California; Ph.D., University of Chicago.

RAY C. LOVE 780 N. Mountain Ave.
Reference Librarian, 1929.
B.A., M.A., Stanford University.

ROBERT S. COLTRIN 455 W. Twelfth St.
College Physician, 1940.
B.A., Pomona College; M.D., University of Rochester. Intern, Resident in Medicine, University of California Hospital; Fellow in Urology, Presbyterian Hospital, New York City; Exchange Fellow in Physiology, University of Kiel, Germany.

EMERITI

ROSE ELLA BERRY 353 W. Eleventh St.
Emeritus Dean of Women and Associate Professor of Mathematics. 1909.
B.S., M.A., Mount Holyoke College.

- FRANK PARKHURST BRACKETT 400 So. Kingsley Drive, Los Ang
Emeritus Professor of Astronomy on the Frank Parkhurst Brackett Foundation
Director of the Observatory. 1888.
 B.A., M.A., Sc.D., Dartmouth College; Sc.D., Pomona College.
- BERNARD CAPEN EWER 706 Indian Hill B
Emeritus Professor of Psychology. 1916.
 B.A., M.A., Brown University; Ph.D., Harvard University.
- MARION JEANETTE EWING 487 W. Sixth
Emeritus Assistant Librarian. 1912.
 B.A., Olivet College; B.S., Simmons College; M.A., Boston University.
- CHARLES TABOR FITTS 4435 N. Live Oak D
Emeritus Professor of Education. 1919.
 B.A., Amherst College; M.A., University of California. Graduate study, Har
 University.
- JESSIE EDITH GIBSON 68 S. La Senda, Three Arch Bay, South Lag
Emeritus Dean of Women on the Martha N. Hathaway Foundation. 1927.
 B.A., University of Idaho; M.A., University of Washington. Graduate study, Calif
 and Columbia Universities.
- WILLIAM ATWOOD HILTON 1293 Dartmouth A
Emeritus Professor of Zoology on the Willard George Halstead Foundation. 190
 B.S., Ph.D., Cornell University.
- ERNEST E. JONES 905 College A
Treasurer Emeritus. 1909.
 B.A., Pomona College.
- CYRIL JURECKA 163 W. Eleventh
Emeritus Assistant Professor of Art. 1932.
 Graduate, Imperial and Royal College of Sculpture, Horice, Bohemia.
- WILLIAM KIRK 705 Indian Hill B
Emeritus Professor of Sociology on the Henry Snyder Foundation. 1922.
 B.A., Ph.D., Johns Hopkins University.
- ELLIOTT CURTIS LINCOLN 472 W. Tenth
Emeritus Professor of English on the Phebe Estelle Spalding Foundation. 1924.
 B.A., Colby College; M.A., State College of Washington and Harvard University.
- RALPH HAINE LYMAN 357 W. Tenth
Emeritus Professor of Applied Music, Head of Department of Music. 1917.
 B.A., Grinnell College. Student in voice with Karleton Hackett, William B. C
 Grant Hadley, Arthur Middleton, Courtland Cooper, Holmes Cowper and o
 American masters and with Vittorino Moratti in Berlin. D.Mus., Grinnell Coll
- HELEN MARBURG 446 Grinnell D
Emeritus Associate Professor of Romance Languages. 1940.
 B.A., University of London; Ph.D., Stanford University.
- BRUCE McCULLEY 210 E. Foothill B
Emeritus Professor of English Literature. 1921.
 B.A., Hiram College; M.A., University of Chicago; Ph.D., Harvard University.

The Faculty

13

LLIAM EVAN NICHOLL 240 E. San Jose
Emeritus Dean of Students. 1919.
 B.A., Bellevue College; M.A., Columbia University. Graduate study, Edinburgh University.

GENE WHITE NIXON 3163 Indian Hill Blvd.
Emeritus Professor of Physical Education for Men. 1916.
 B.A., Monmouth College; M.A., Columbia University. Graduate study, Illinois and California Universities.

ERETT SAMUEL OLIVE South Laguna
Emeritus Professor of Piano. 1923.
 B.Mus., Simpson College. Graduate study, Simpson College.

LLIAM POLK RUSSELL 540 E. Sixth St.
Emeritus Professor of Mathematics on the Joseph W. Fiske Foundation. 1904.
 B.A., M.A., Cumberland University.

ORGE STEDMAN SUMNER 305 College Ave.
Emeritus Professor of Economics and Sociology. 1897.
Controller, 1922-1941.
 B.A., Pomona College; B.A., Ph.D., Yale University.

WARD TAYLOR 1022 Harvard Ave.
Emeritus Professor of Engineering Mathematics. 1920.
 C.E., University of Minnesota; M.A., University of Southern California.

LAND RAY TILESTON 1245 Oak Grove Ave., San Marino
Emeritus Professor of Physics on the Seeley W. Mudd Foundation. 1925.
 B.A., M.A., Dartmouth College; D.Sc., Colorado College.

PROFESSORS

ALTER ALFRED ALLEN³ 175 E. Twelfth St.
Professor of Musical Theory and Appreciation. 1912.
 B.A., Beloit College; B.Mus., Yale University. Associate, American Guild of Organists.

Y ERWIN BABER 999 College Ave.
Professor of Sociology on the Henry Snyder Foundation. 1939.
 B.A., Campbell College; M.A., Ph.D., University of Wisconsin.

AL BAUMANN 460 University Circle
Professor of German. 1931.
 Ph.D., University of Basel.

MAN BENSON 455 University Circle
Professor of Botany on the Henry Kirke White Bent Foundation. 1944.
 B.A., M.A., Ph.D., Stanford University.

YD A. BOND 234 W. Eighth St.
Professor of Economics on the Stedman-Sumner Foundation. 1948.
 B.A., M.A., Ph.D., University of Michigan.

CH'EN SHOU-YI

Professor of Chinese Culture, 1941.

B.A., Lingnan University; Ph.D., University of Chicago; Fellow of the Acad Sinica.

690 Indian Hill B

JAMES WHITE CROWELL

Professor of Romance Languages, 1929.

B.S., M.A., Haverford College; Ph.D., Cornell University.

450 University C

HAROLD DAVIS

Professor of English on the Phebe Estelle Spalding Foundation, 1927.

B.A., Stanford University; B.A. and B.Litt., University of Oxford.

612 W. Tenth

ROBERT SIDNEY ELLIS

Professor of Psychology, 1931.

B.A., University of Arkansas; Ph.D., Clark University.

1217 Dartmouth A

KENNETH G. FISKE

Professor of Music, 1936.

B.Mus., M.Mus., American Conservatory of Music. Pupil of Leon Sametini, Jac Gordon, Otakar Sevcik.

585 W. Twelfth

CHARLES A. FOWLER, JR.

Professor of Physics on the Seeley W. Mudd Foundation, 1947.

B.A., M.S., University of Utah; Ph.D., University of California.

256 E. Second

JOHN HOWES GLEASON

Professor of History on the Warren Finney Day Memorial Foundation, 1939.

B.A., Ph.D., Harvard University; B.Litt., University of Oxford.

512 Baughman A

CHARLES MAXFIELD HARSH

Professor of Psychology, 1950.

B.S., California Institute of Technology; M.A., Ph.D., University of California.

2918 Claremont Heights

HUBERT HERRING

Professor of Latin American Civilization, 1945.

B.A., Oberlin College; M.A., Columbia University; Graduate, Union Theological Seminary.

880 Dartmouth A

ERNEST R. HUGHES

Visiting Professor of Chinese Culture, 1950.

B.A., and M.A., University of Oxford

425 Harvard A

MARGARET HUSSON^a*Professor of Spanish, 1925.*

B.A., University of Kansas; M.A., Columbia University. Graduate study, centro Estudios Históricos, Madrid.

1250 Amherst A

FRANCIS RAYMOND IREDELL

Professor of Philosophy on the Robert C. Denison Foundation, and Dean of Faculty, 1925.

B.A., Pomona College; M.A., Ph.D., Harvard University.

1060 College A

- HESTER GEORGE JAEGER 1045 Yale Ave.
Professor of Mathematics on the Joseph N. Fiske Foundation, 1931.
 B.A., B.S., M.A., Ph.D., University of Missouri.
- WILLIAM THOMAS JONES 4201 Via Padova
Professor of Philosophy, 1938.
 B.A., Swarthmore College; B.Litt., University of Oxford; Ph.D., Princeton University.
- GEORGE KARO 618 Dartmouth Ave.
Visiting Professor of Greek and Roman Art and Archaeology, 1948.
 Student, University of Munich; Ph.D., University of Bonn.
- JOHN HASKELL KEMBLE Smiley Hall
Professor of History, 1936.
 B.A., Stanford University; M.A., Ph.D., University of California.
- CHARLES GEORGE PARRISH 338 Harvard Ave.
Professor of Music, 1949.
 B.Mus., MacPhail School of Music; M.A., Cornell University; Ph.D., Harvard University.
- ELLIS CONWAY PIERCE 145 E. Eleventh St.
Professor of Chemistry on the Carnegie Foundation, 1945.
 B.S., D.Sc., Georgetown College; M.S., Ph.D., University of Chicago.
- JEREMY DAVID SCOTT 828 College Ave.
Professor of Public Address, 1923.
 B.A., University of Southern California; S.T.B., Ph.D., Boston University. Graduate work, Brown and Harvard Universities.
- WILLIAM ALBERT STRATHMANN¹ 160 W. Eleventh St.
Professor of English, 1932.
 B.A., M.A., Ph.D., Johns Hopkins University.
- BERT LOBINGIER STREHLE 1019 Dartmouth Ave.
Professor of Physical Education for Men, 1923.
 B.A., Pomona College; M.A., Claremont Graduate School; Graduate study, University of Southern California, University of California, Stanford University.
- BERLIN O. TRYON 641 Indian Hill Blvd.
Professor of Military Science and Tactics, 1950.
 B.A., Arizona State College; Graduate, Basic and Advanced Infantry Schools; Lt. Colonel, Infantry, United States Army.
- JOHN ALBERT VIEG¹ 435 W. Eighth St.
Professor of Government, 1945.
 B.A., St. Olaf College; M.A., University of Iowa; Ph.D., University of Chicago.
- ALGER TICKNOR WHITNEY 445 W. Tenth St.
Professor of Astronomy on the Frank P. Brackett Foundation and Director of the Observatory, 1929.
 B.S., M.S., Pomona College; Ph.D., University of Chicago.
- FRED OSWALD WOODFORD 443 W. Tenth St.
Professor of Geology, 1915.
 B.A., Pomona College; Ph.D., University of California.

ASSOCIATE PROFESSORS

- VIRGINIA PRINCEHOUSE ALLEN¹ 175 E. Twelfth
Associate Professor of Dramatics, 1930.
 B.A., Pomona College; Graduate study, Department of Drama, Yale University; M.
 Claremont Graduate School.
- JOSEPH WARNER ANGELL 202 N. College A
Associate Professor of English, 1939.
 B.A., College of Wooster; M.A., University of Oregon; Graduate study, Yale University.
- WILLIAM G. BLANCHARD² 1495 Via Zu
Associate Professor of Music and College Organist, 1936.
 B.Mus., DePauw University; M.Mus., University of Michigan. Further study with
 Weinrich and Hugh Porter in organ and with Seth Bingham in composition.
- FREDERICK BRACHER 814 Dartmouth A
Associate Professor of English, 1944.
 B.S., Oregon State College; M.A., Ph.D., University of California.
- ELIZABETH CAWTHORNE 228 Harvard A
Associate Professor of Physical Education for Women, 1935.
 B.A., M.A., University of California.
- DARYL DAYTON 262 W. Sixth
Associate Professor of Music, 1938.
 B.Mus., Oberlin College; Graduate study in Berlin and New York with Artur Schnabel.
 Leonard Shure, Dalies Frantz, and Guy Maier.
- EDWARD MONTGOMERY FRYER 231 W. Tenth
Associate Professor of Physics, 1946.
 B.A., Pomona College; M.E., Ph.D., Stanford University.
- HUGH J. HAMILTON 1269-C Harvard A
Associate Professor of Mathematics, 1936.
 B.A., University of California at Los Angeles; M.A., Ph.D., Brown University.
- CORWIN HERMAN HANSCH 129 E. Sixth
Associate Professor of Chemistry, 1946.
 B.S., University of Illinois; Ph.D., New York University.
- COLVIN HEATH 750 Indian Hill B
Associate Professor of Physical Education for Men, 1922.
 B.A., Pomona College; M.A., Stanford University.
- CHARLES SHIVELEY HOLMES³ 1245 Dartmouth A
Associate Professor of English, 1941.
 B.A., Oberlin College; Ph.D., Princeton University.
- LUTHER JAMES LEE, JR. 1030 Dartmouth A
Associate Professor of Government, 1941.
 B.A., Pomona College; M.A., Ph.D., University of California.

The Faculty

17

- WILLIAM D. MCCARTHY³ 444 Harrison Ave.
Associate Professor of Zoology, 1946.
 B.S., West Chester State Teachers College; Ph.D., University of Pennsylvania.
- CHARLES JAY MERRITT 1865 E. Foothill, Glendora
Associate Professor of Physical Education, 1925.
 B.A., Pomona College; M.A., Claremont Graduate School.
- HENRY CORD MEYER 470 Harrison Ave.
Associate Professor of History, 1946.
 B.A., University of Colorado; M.A., University of Iowa; Ph.D., Yale University.
- FREDERICK LUDWIG MULHAUSER, JR. 424 W. Eleventh St.
Associate Professor of English, 1941.
 B.A., College of Wooster; M.A., Ph.D., Yale University.
- WILLIS E. PEQUEGNAT 433 Harrison Ave.
Associate Professor of Zoology on the Willard George Halstead Foundation, 1940.
 B.A., University of California; Ph.D., University of California at Los Angeles.
- WRIGHT LEONARD RYERSON 107 E. San Jose
Associate Professor of Zoology, 1946.
 B.A., M.S., University of Arizona; Ph.D., University of California at Los Angeles.
- JOHN SEWALL SHELTON 1100 Oxford Ave.
Associate Professor of Geology, 1946.
 B.A., Pomona College; Ph.D., Yale University.
- NELSON SMITH³ 145 E. Sixth St.
Associate Professor of Chemistry, 1945.
 B.A., Pomona College; M.A., Ph.D., Stanford University.
- JOHN ROBERT VON ROHR 1111 Harvard Ave.
Associate Professor of Religion, 1945.
 B.B.A., University of Minnesota; B.D., Chicago Theological Seminary; Ph.D., Yale University.
- EMILIE ELIZABETH WAGNER 783 W. Tenth St.
Associate Professor of German, 1928.
 B.A., Smith College; M.A., Pennsylvania State College. Doctorat de l'Université
 mention Lettres, Toulouse.

ASSISTANT PROFESSORS

- MARGERY SMITH BRIGGS 420 Baughman Ave.
Assistant Professor of Music, 1943.
 B.Mus., B.Mus.Ed., M.Mus., Chicago Musical College.
- KAREN BURT 14569 E. Teton Dr., Puente
Assistant Professor of Physical Education for Women, 1943.
 B.E., University of California at Los Angeles; M.A., University of Southern California.

CHARLES C. JOHNSON

406 Elder D

Assistant Professor of Military Science and Tactics, 1949.

B.S., Washington State College; Graduate, Advanced Infantry School. Major, Infantry, United States Army.

GRETCHEN GRAF JORDAN

628 Dartmouth A

Assistant Professor of English, 1947.

B.A., M.A., Ohio State University; Ph.D., University of California at Los Angeles.

GORDON CANFIELD LEE

1035 Columbia A

Assistant Professor of Education, 1948.

B.A., University of California; M.A., Ph.D., Columbia University.

RICHARD N. LOUCKS

Assistant Professor of Music, 1948.

B.A., Pomona College; M.A. and Doctoral Candidate, Eastman School of Music.

SHELDON H. MENDELSON

457 Grinnell

Assistant Professor of Military Science and Tactics, 1950.

B.C.E., City College of New York; Advanced Infantry School; Captain, Infantry, United States Army.

DENISE OBRECHT

320 W. Eighth

Assistant Professor of French, 1950.

Licence ès-lettres, Diplôme d'Études Supérieures, University of Strasbourg; Doctoral Candidate, Sorbonne, Paris.

LOUIS B. PERRY

2929 Claremont Hts. D

Assistant Professor of Economics, 1947.

B.A., M.A., Ph.D., University of California at Los Angeles.

EDWIN ALLEN PHILLIPS

Eli P. Clark

Assistant Professor of Botany, 1948.

B.A., Colgate University; M.A., Ph.D., University of Michigan.

ALVIN HEWITT SCAFF

670 S. College A

Assistant Professor of Sociology, 1947.

B.A., University of Texas; B.D., Chicago Theological Seminary; M.A., Ph.D., University of Texas.

ELMER B. TOLSTED

105 N. College A

Assistant Professor of Mathematics, 1947.

B.S., M.S., University of Chicago; Ph.D., Brown University.

EDWARD WEISMILLER

145 W. Seventh

Assistant Professor of English, 1949.

B.A., Cornell College; M.A., Harvard University; D.Phil., University of Oxford.

INSTRUCTORS

YOST U. AMREIN

Instructor in Zoology, 1951.

B.A., M.A., Doctoral Candidate, University of California at Los Angeles.

The Faculty

19

- THOMAS B. BELL 417 E. Cucamonga Ave.
Instructor in Physical Education for Men, 1947.
 B.A., M.A., University of California.
- GEORGE F. BREAK 916 Harvard Ave.
Instructor in Economics, 1949.
 B.Com., University of Toronto; Doctoral Candidate, University of California.
- MARRY JOSEPH CARROLL, JR. 132 E. Seventh St.
Instructor in Classics, 1948.
 B.A., University of Akron; M.A. and Doctoral Candidate, Harvard University.
- HEDRYC R. DARBY 1390 Harvard Ave.
Instructor in Government, 1949.
 B.A., M.A., Occidental College; Doctoral Candidate, University of California.
- JAMES E. GRANT 305 W. Eleventh St.
Instructor in Art, 1950.
 B.E., M.F.A., University of Southern California; Student at Jepson Art Institute.
- IRTON HENKE 153 E. Sixth St.
Instructor in Physics, 1948.
 B.A., Miami University; M.A. and Doctoral Candidate, California Institute of Technology.
- ARGOT JEAN 224 S. Doheny Dr., Beverly Hills
Visiting Instructor in Violoncello, 1946.
 Pupil of Jacob at the Royal Conservatoire in Brussels.
- ERL GEORGE KOHN
Instructor in Music, 1950.
 Studied piano in Vienna; Teacher's Certificate and Artist Diploma, New York College of Music; B.A., Harvard University. Advanced study in conducting with Julius Pruewer, theory and composition with Paul Hindemith, Walter Piston; and Randall Thompson.
- VICENT H. LEARNIHAN 220 W. Tenth St.
Instructor in History, 1949.
 B.A., M.A., Doctoral Candidate, University of California at Los Angeles.
- WARD W. MALAN 137 N. College St.
Instructor in Physical Education for Men, 1950.
 B.A., Pomona College; M.A., Claremont Graduate School; Graduate Student, University of California at Los Angeles.
- BERT WARNER OLIVER 260 E. Third St.
Instructor in Economics, 1950
 B.A., M.A., University of Southern California; Doctoral Candidate, Princeton University.
- WODROW WILSON SAYRE 780 N. Mountain Ave.
Instructor in Philosophy, 1948.
 B.A., Williams College; M.A., and Doctoral Candidate, Harvard University.

- MAXINE J. SHURTZ 147 W. Sixth S
Instructor in Physical Education for Women, 1947.
 B.A., Miami University; M.S., Wellesley College.
- IRMA SOONG 828 Harvard Av
Instructor in Oriental Affairs, 1950.
 B.A., Yenching University; M.A., Mills College.
- HAROLD W. STEVENSON 448 Grinnell Av
Instructor in Psychology, 1950.
 B.A., University of Colorado; M.A. and Doctoral Candidate, Stanford University.
- SALLY ANNE TAYLOR 1020 Berkeley Av
Instructor in Physical Education for Women, 1950.
 B.A., Pomona College; M.A., Stanford University.

LECTURERS

- WILLIS L. BURNHAM 1022 Harvard Av
Lecturer in Engineering Drawing, 1951.
 B.A. candidate, Pomona College.
- ERNST HEINRICH EIN 1132 Harvard Av
Lecturer in Russian, 1950.
 Graduate, Law School of Tartu University; D. J., Institute of Roman Law, Rome.
- CHARLES B. LAWLER 3560 Padua Av
Lecturer in Sculpture, 1949.
 B.A., University of California. Studied under Charles Malfray in Paris, California School of Fine Arts, San Francisco, and Alexander Archipenko.
- HELEN M. SMITH 120 W. Third S
Lecturer in Music, 1949.
 B.A., Pomona College.

¹Absent on leave, first semester, 1951-52.

²Absent on leave, second semester, 1951-52.

³Absent on leave, 1951-52.

FACULTY COMMITTEES 1951 - 1952

First person named is the Committee Chairman

Administration—President, Dean of the Faculty, Walton, Vieg, Woodford, Scott, Ryerson, Bond.

Admission—Sanders, Beatty, Walton, Crowell, Maple, Fryer.

Athletic Council—Strehle, Perry, Fryer, three student representatives, and two alumni representatives.

Pomona College representatives on the Southern California Intercollegiate Athletic Conference—Jaeger, Strehle.

Classification—Maple, Kemble, Jones, Hamilton, Gordon Lee.

Student Affairs—Sanders, Beatty, Jaeger, Walton, Phillips, Mulhauser, Fowler, Scaff, and four members of the Executive Council of the Associated Students.

Courses of Study—Iredell, Bond, Strathmann, Parrish, Maple, Sanders, Kemble, Fowler, Vieg, Pierce, Pequegnat, Harsh, Gleason.

English—Jordan, Henke, Hamilton, Soong.

Library—Gleason, Davies, Bond, Parrish, Angell, Hamilton, Benson.

Personnel—Sanders, Walton, Maple, Bracher, Beatty, Harsh, and four student representatives selected by the Executive Council of the Associated Students.

Pre-Medical—Pequegnat, Beatty, Fowler, Coltrin, Hansch, Ryerson.

Public Events—Iredell, Luther Lee, Scott, Parrish, Meyer, Hansch, Kemble, Wheaton, and three student representatives selected by the Executive Council of the Associated Students.

Religious Activities—von Rohr, Scott, Scaff, Vieg, Shelton, Pierce, Mulhauser, Sayre, two representatives of Christian Association.

Scholarships and Student Aid—Sanders, Walton, Meyer, Baber, Bracher, Strehle, Beatty.

Vocational Counselling and Placement—Beatty, Perry, Walton, Sanders, Hansch, Bracher, Cawthorne, Wheaton, Gordon Lee, and student members appointed by Associated Men Students and Associated Women Students.

The College

POMONA COLLEGE is an independent, privately endowed, coeducational institution of arts and sciences. Originally established in 1887 to serve its immediate region, the college now enjoys support from every section of the United States.

The College owes its inception to early settlers in Southern California whose previous affiliations led them to the founding of "Christian College of the New England type." Under the leadership of the Reverend Charles B. Sumner, a devoted and self-sacrificing group were appointed members of the first Board of Trustees by the General Association of Congregational Churches of Southern California. The original trustees were: Henry K. Wells, Bent, Nathan W. Blanchard, Anson Brunson, Elwood Cooper, James T. Ford, James H. Harwood, Dexter D. Hill, Theodore Hunt, George W. Marston, John K. McLean, Henry A. Palmer, Seth Richards, Charles B. Sheldon, Charles B. Sumner, and Andrew J. Wells.

With the freedom characteristic of Congregational organization, the College soon made itself the servant of a wider Christian fellowship. Today the Board of Trustees is a self-perpetuating body, free from ecclesiastical control but pledged under its charter to maintain the institution as truly Christian, though nonsectarian. Conscious of its heritage, the College gives every encouragement to both the study and practice of religion by its students. Within the curriculum the department of religion offers general courses designed for all students, and more specialized work for those desiring to concentrate in religion. Church and chapel services and the work of the Christian Association emphasize the place of religious thought and activity in the life of the campus.

The College was incorporated October 14, 1887, and instruction was begun in September, 1888, in a small rented house in the city of Pomona. The following January an unfinished hotel in Claremont (now Sumner Hall), together with considerable land adjacent, was given to the College and the work was transferred to that place. Although this location was originally regarded as temporary, Claremont later became the permanent home of the College. By that time, however, the name of "Pomona College" had become so definitely fixed to the institution that it was retained notwithstanding the location.

The College met a need for higher education in Southern California, and after the initial years its growth was constant. The first class was graduated in 1894, at which time the total number of college students was forty-seven. The preparatory department, essential in the beginning, was discontinued in 1910.

Enrollment at Pomona College is restricted to approximately one thousand students, divided equally among the four classes. During the academic year 1950-51, there were enrolled 559 men and 440 women.

Pomona is a liberal arts college, which affords a full academic program in the social sciences, the natural sciences, and the humanities. The curriculum is planned to give a comprehensive understanding of society rather than technical training in highly specialized fields. The College believes that the best preparation for life is liberal education, and it aspires thus to train men and women for professional, business, and civic leadership.

From its foundation the College has emphasized the highest standards of scholarship, both in its program and in the selection of its students. Pomona's devotion to scholarship received national recognition as early as 1914, when the College was awarded a chapter of Phi Beta Kappa. Since 1924 the College has given further impetus to academic achievement by offering an honors type of instruction which affords opportunities for independent study to outstanding students.

The College recognizes that a primary requisite in the promotion of high scholarship is the intimate contact of students and faculty. Pomona maintains a large faculty in relation to its student body and constantly seeks to promote close relations between students and instructors. During 1951-52 the college will have a faculty member for every ten students enrolled. Elementary courses are divided into sections small enough to provide opportunity for discussion. In their upper division courses students have abundant opportunity for individual attention.

Pomona believes that the highest values of a liberal education can be attained best in a residence college. Through the efforts of its Trustees the College now possesses one of the finest groups of dormitories and dining halls to be found in the country. Approximately 800 students can be accommodated in the dormitories, and all students except the small group staying at home take their meals in the college dining halls.

The College owes the development of the campus and the growth of its financial resources to the generosity of patrons, friends, and alumni. As an independent institution, without assistance from a governmental or church body, Pomona must rely upon gifts for the expansion of its program and for the increase of its endowment upon which depends the financial strength of the college. From the contributions of her benefactors the total assets of Pomona now surpass \$11,000,000, of which \$5,540,203.97 is in endowment.

THE ASSOCIATED COLLEGES

Pomona College is the original institution in a group of four Associated Colleges, of which the other members are Claremont College, Scripps College, and the Claremont Men's College. Although each college is autonomous and independently controlled by its own Board of Trustees, the four institutions cooperate in the academic programs and in use of certain common facilities.

The group, which represents a combination of English and American practices, arose from the desire of Pomona College to maintain for itself the advantages of a small college and at the same time to provide at Claremont an educational opportunity for the increasing numbers of young men and women who at the end of World War I were seeking admission to the College.

Under the leadership of the Pomona trustees, the institution now incorporated as Claremont College was established on October 1, 1925, for the inauguration of the new plan. It assumed responsibility of acting as a central coordinating agency, the direction of graduate instruction for the Associated Colleges, and the foundation of new institutions as they might be required. Claremont College conducts its instructional program under the name of "The Claremont Graduate School," and the presidents of the undergraduate colleges, in addition to their duties in their respective colleges, serve in rotation for two year terms as head of Claremont College with the title of Provost. In addition to its own appointees the faculty of the Claremont Graduate School includes most members of the three undergraduate faculties.

An early objective of the group plan was the establishment of a college for women. In September, 1927, Scripps College, named in honor of Miss Ellen Browning Scripps, whose generosity and vision made it possible, was opened as a residence college for 225 women.

From the beginning the main feature of its curriculum has been a unified sequence of courses in the humanities.

Claremont Men's College, the third undergraduate institution, was established in 1946 as a liberal arts college training particularly in business and public administration. The College is developing residence and academic facilities for approximately 300 students.

The four colleges cooperate in their academic programs and thus afford for their students many of the advantages of a university center. The undergraduate colleges open their classes without tuition charges to students in the other undergraduate institutions. Selected courses in the Claremont Graduate School are open to seniors at Pomona, Scripps, and Claremont Men's College.

The colleges maintain a common business office and a joint health service which includes the full time services of a physician and the operation of a thoroughly up-to-date infirmary. A joint library service purchases and catalogues books for the three libraries. Bridges Auditorium, which seats 2600, is administered by Claremont College for the group.

CLAREMONT

One of Pomona's greatest assets is Claremont, the academic community of 6,000 that has grown up around the college. The early settlers were New Englanders and they gave to Claremont an atmosphere unusual on the Pacific Coast.

With the growth of Pomona and the foundation of the other associated colleges the village has come to be a cultural center of unusual significance. Three private preparatory schools are now located in Claremont. Under the auspices of the Congregational Church, Pilgrim Place, a community for retired ministers and missionaries, was founded in 1915. Each winter the village entertains a number of visitors who come to enjoy the climate and the beauty of citrus groves beneath towering, snow-capped mountains. Although Pomona College students enjoy in Claremont the charm and intimacy of a New England village, they are in no sense isolated from the life of Southern California, for the college is only four miles from Pomona, a city of over 35,000 inhabitants, and thirty-five miles from Los Angeles, with which it has hourly connections. Claremont is on the main line of the Santa Fe Railway, and the transcontinental lines of the Union Pacific and the Southern Pacific pass through the city of Pomona.

The Campus

POMONA COLLEGE occupies about one hundred and twenty acres of which sixty are included in Blanchard Park, the gift of Nathan W. Blanchard, about ten in Alumni Athletic Field and fifty in the campus proper. The College centers on Mars Quadrangle, built and endowed by George W. Marston, 1850-1910, a distinguished citizen of San Diego, an original trustee of Pomona and for many years president of the board.

The twenty-six buildings on the campus are heated from a central plant which serves the four colleges.

ADMINISTRATION AND CLASSROOM BUILDINGS

Mary L. Sumner Hall, a hotel which in 1889 became the original building of the college, was removed from its first site in 1922, remodeled for administrative and faculty uses, and named in memory of the wife of Rev. Charles B. Sumner, LL.D., one of the Founders of Pomona College.

Holmes Hall, the first academic building erected by the college in 1893, is a memorial to Cyrus W. Holmes, Jr., of Massachusetts. Reconstructed in 1916 in conformity with modern plans for buildings and campus, it is now devoted to recitation rooms, departmental offices, and an auditorium seating 750.

The Associated Colleges maintain a joint Business Office in Harper Hall, constructed in 1931.

ART AND MUSIC BUILDINGS

Rembrandt Hall, built in 1914, is devoted to the Department of Art. The upper floor contains studio and work rooms; the lower floor two galleries, one of which was added in 1937.

The Mabel Shaw Bridges Hall of Music, given by Mr. and Mrs. Appleton S. Bridges of San Diego in 1915, in memory of their daughter who died while a student at Pomona College, offers excellent facilities for the study of music. It contains, in addition to private studios, an unusually beautiful auditorium seating 600.

The Mable Shaw Bridges Auditorium, also the gift of Mr. and

rs. Appleton S. Bridges in memory of their daughter, was constructed in 1931. It has a seating capacity of 2600, and is administered by Claremont College on behalf of the Associated Colleges. The Open-Air Theatre, built in 1910, takes advantage of the natural beauty of Blanchard Park.

SCIENCE BUILDINGS

Parsons Hall of Science, the gift of Dr. D. K. Pearsons in 1898, contains the laboratories and lecture rooms of the Departments of Physics and Mathematics.

The Frank P. Brackett Observatory, the gift of Mr. Llewellyn By, '01, has served the Department of Astronomy since 1908.

The Seaver Laboratory, a separate building in the Observatory area, was completed in 1950. The dome houses the Clara Whitney Catto Reflector Telescope, and the main floor contains classrooms and a library.

Harwood Hall, given in 1915 by Mr. A. P. Harwood, contains lecture rooms and laboratories for the use of the Department of Geology.

The Mason Hall of Chemistry, the gift of Mr. W. S. Mason, 1922, provides ample facilities for the study of Chemistry, and houses the Department of Geology.

The Crookshank Hall of Zoology, given in 1922 by Dr. D. C. Crookshank, is occupied by the Departments of Botany and Zoology.

THE LIBRARY

The Library, the gift of Mr. Andrew Carnegie, was constructed in 1908, and underwent extensive renovation in the summer of 1941. Reading rooms accommodate 350 readers. Except for the special science collections, all books and bound periodicals are housed in the main library.

PHYSICAL EDUCATION AND ATHLETIC FACILITIES

The War Memorial Gymnasium, given to the college by students, alumni, trustees, and friends, commemorates the men and women of Pomona College who gave their lives in World War I and World War II. Completed in December, 1950, the Memorial Gymnasium is one of the finest and most beautiful college gymnasiums in

the country. The building includes an excellent basketball court with seats for 1200 spectators, a classroom, a memorial library, staff offices, and commodious shower and locker rooms.

The Memorial Training Quarters, constructed in 1922 as a memorial to the men of Pomona College who lost their lives in World War I, has been incorporated as the east wing of the new Memorial Gymnasium. It represents the gift of the parents of one of these men, Sheldon Gerry, '17, supplemented by the gifts of alumni, students, and friends. Among other facilities the Training Quarters contain dressing rooms for swimming for both men and women, and the freshman locker rooms.

A swimming pool, of the standard size for water polo, and fully equipped with modern appliances, is open to both men and women for instruction and recreation throughout the year.

Alumni Field, consisting of about ten acres, has been developed by the alumni into athletic grounds admirably equipped and unsurpassed in the Southwest in beauty of setting. First-class tennis courts, an excellent track, baseball and football fields, also hockey and basketball courts are within the limits of the campus. A beautiful ticket booth, wall and gate to Alumni Field were built in the autumn of 1950, as a gift of the class of 1916.

The William Renwick Gymnasium, named in memory of an early donor to the college, contains the original Pomona College Gymnasium built in 1899, and a larger building first erected as a military barracks in World War I. The two buildings now joined together provide an excellent basketball court and general facilities for the women's department of physical education.

RESIDENCE AND DINING HALLS FOR MEN

The Albert K. Smiley Hall, the first dormitory for men, built in 1908, accommodates seventy-two students and one instructor.

The Eli P. Clark residence unit for men, erected in 1919, includes three dormitories with accommodations for 290 students.

Further accommodations are available for both single and married men in fifty-two apartments originally given to the college by the United States government for use of veterans.

Fraternity Dining Hall for Men, given by Mr. George W. Marsden in 1929 in memory of Rev. Lucien H. Frary, a Trustee from 1891 to 1903, seats 375 in the main hall and includes three smaller dining rooms for special uses.

RESIDENCE AND DINING HALLS FOR WOMEN

Harwood Court, constructed in 1921 and named in memory of Mrs. Charles E. Harwood, and which also includes Strong Hall, accommodates 180 women.

Florence Carrier Blaisdell Hall, erected in 1936 and named in honor of Mrs. James A. Blaisdell, wife of the fourth President of the College, houses 120 women.

Della Mulock Mudd Hall, which honors the wife of the late Seeley W. Mudd, a Trustee of Pomona, was completed in the spring of 1947. The building has accommodations for 100 women, most of them in single rooms.

The College also maintains two houses as residences for women, the Casa Española and the Maison Française, which are reserved for students majoring in Spanish and French.

Beautiful and commodious dining facilities are available for all women students. Residents of Harwood Court are served by the Aurelia Squier Harwood Memorial Dining Hall built in 1931.

The Mary McLean Olney Dining Hall, constructed in 1936, has accommodations for 120 students.

Since September, 1949, students living in Blaisdell Hall and Mudd Hall have taken their meals in the new Jessie E. Gibson Dining Hall connecting these buildings.

EDMUNDS UNION

The Charles K. Edmunds and Katharine P. Edmunds Student Union, which honors the late fifth President of the College and his wife, provides a social center for all students and an attractive ballroom in which all formal dances are held. This building, made possible by the gifts of many parents supplemented by funds from the Associated Students and the bequest of the late Florence Key, was built in 1937 and houses student offices, including publications, the graduate manager's office, and the Cooperative Store. A new east wing to Edmunds Union, which houses the fountain, sandwich facilities, and also includes a full basement for recreational use, was completed in January, 1951.

HEALTH FACILITIES

Memorial Infirmary, given in 1931 in memory of Colonel Seeley W. Mudd, is administered by Claremont College and is operated

jointly for the benefit of students in all the Associated Colleges at Claremont. Twenty-four beds are available. The Infirmary is situated on Amherst Avenue, north of Foothill Boulevard.

A jointly operated Medical Dispensary, located at 241 East Street, provides an office where the College Physician and nurse are available for daily consultation and treatment for minor ailments.

OTHER FACILITIES

The President's House at 345 North College Avenue was the gift of Dr. D. K. Pearsons. It was constructed in 1897, and has been the home of all Presidents of the College since that time.

A replica of the original house in Pomona in which the College first opened in September, 1888, was erected on the campus in 1937 through the generosity of an anonymous donor. It contains the historical exhibit set up in recognition of the College's Fiftieth Anniversary, and will become ultimately a museum of Pomona history.

The College operates its own independent deep well water supply, the gift of Edward P. and Mary G. Bosbyshell.

THE CLAREMONT INN

The Claremont Inn, beautifully located on College Avenue opposite the campus since 1906, is the guest house of the colleges and community, and is owned by Pomona College. Parents and friends are invited to use the facilities of the Inn for longer or shorter periods during visits to Claremont. Public and private dining rooms and accommodations for sixty guests under both the American and European plans are provided. Students who do not return home during vacation periods find the Inn a convenient vacation home. The hospitality of the Inn expresses the friendliness of the colleges and the community.

Admission

STUDENTS ARE ADMITTED to Pomona College upon evidence which satisfies the Committee on Admissions that: (1) the applicant possesses the necessary preparation and ability to carry successfully the academic program offered here, and will actually use them to that end; (2) the College, with its program and traditions, and the applicant, with his capacities, interests and needs, are mutually well suited to each other.

The Committee tends to judge the fitness of an applicant in terms of reasonably definite academic prerequisites but it makes every effort to form judgments on the basis of the total picture rather than in terms of narrowly technical requirements.

Any person interested in preparing for Pomona, or any school official who is responsible for directing the preparatory programs of students is invited to call on the Dean of Admissions at any time regarding the acceptability of candidates or for advice on specific programs.

For further information, write to Office of Admissions, Sumner Hall, Pomona College, Claremont, California.

ADMISSION TO FRESHMAN STANDING

The College does not require any particular pattern of secondary school courses, but assumes candidates will have taken a college preparatory course. Under ordinary circumstances they are advised to complete at least three years of satisfactory study in English. Two years of mathematics are advised for all candidates. Those who plan to study mathematics or the physical sciences in college should have at least three years or more, preferably including trigonometry. (See page 79.) Foreign language credit is not required for admission but for concentration in many fields a reading knowledge of at least one foreign language is essential. It is much to the advantage of a student to begin the acquisition of this knowledge before entering college. Two or three years in social studies and two or three in sciences are also advised. The major attention is given to the quality of preparation rather than to the exact arrangement of subjects.

It is normally assumed that candidates will have received a high school diploma. Students from foreign countries or those who following unusual patterns of preparation may submit other evidences of their readiness to undertake college work.

All freshman candidates are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board (See page 35 for further information.) This requirement does not lessen the importance of the school record, the personal ratings and personal interviews. The test results will be used in the academic advising of freshmen and replace some of the aptitude tests previously given during the registration period.

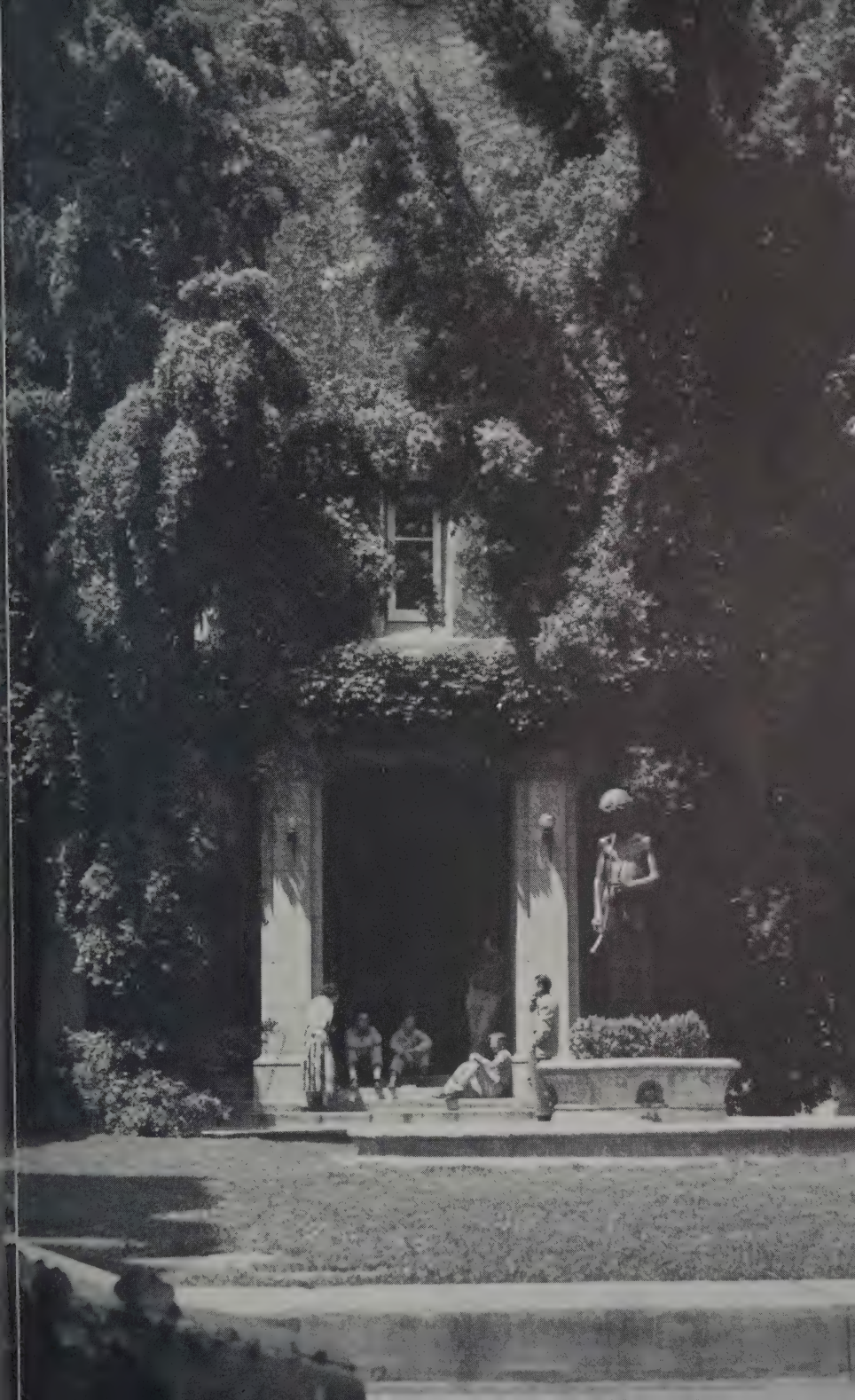
It is recommended that applications be filed at the beginning of the senior year in high school. The Scholastic Aptitude Test should be taken either in January or in March and the candidate is responsible for registering for this with the College Entrance Board. The regular selection of new students will be made from applications received on or before March 15, provided candidates have taken the Scholastic Aptitude Test in March or earlier.

Applications will be accepted between the dates of March 15 and August 15 from candidates who have already taken the Scholastic Aptitude Test or who plan to take it on May 17 or August 13. There is no assurance that there will still be vacancies at that time. These applications will be acted upon as promptly as possible.

Whenever there are more applicants than can be accepted the Admission Committee attempts to select the strongest candidates with little regard to the chronological order in which applications are received. In all cases admission is granted subject to evidence of satisfactory physical condition on the part of the candidate.

ADMISSION TO ADVANCED STANDING

In considering applications for advanced standing the College follows the general policy used for freshman candidates. It requires honorable dismissal from the previously attended institution with an average grade of C or better in liberal arts type of courses taken at accredited collegiate institutions, together with recommendations from the proper college officials. Advanced standing applications may also be required to take an entrance examination, and if they will be notified individually. The transcripts must show a detailed record in all secondary as well as all collegiate institutions attended.





Credit allowed for work taken in other institutions will be determined by the Classification Committee after the candidate has been accepted.

ADMISSION TO SPECIAL CLASSIFICATION

Mature students, particularly those equipped for advanced studies may be admitted as special students to courses for which, by ability and preparation, they may be fitted. Special students are not candidates for a degree, though students admitted to this classification may be accepted later as candidates for a degree.

THREE YEAR PROGRAM FOR JUNIOR COLLEGE GRADUATES

To enable junior college graduates and others who enter with advanced standing to continue their education on the basis of a three-year program leading to the Master's degree as well as to the Bachelor's degree, Pomona College and the Claremont Graduate School have planned their offerings so that the closest articulation of undergraduate and graduate study is possible.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from Massachusetts Institute of Technology after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona. For detailed program see page 79.

APPLICATION PROCEDURE

Application for admission to Pomona College must be made on the form furnished by the college and all credentials must be filed with the Committee on Admissions. The forms and credentials required are:

- *Application Form I.* Including \$5.00 fee, which is not refundable. Make checks or money orders payable to Pomona College.
- *Two Personal Rating Scales, Form II.* Confidential reports by the principal or other school official, and by a class-room teacher, sent by them to the Committee on Admissions.

3. *A Statement of Qualifications.* The Committee seeks the most complete possible picture of each candidate and to this end requires a personal, autobiographical statement to supplement the other information. Some or all of the following points may be discussed although the candidate need not consider this an outline to be followed: (1) your preparation or background for college other than that which will be evident from your school record; (2) your major aptitudes and interests either of an academic or non-academic nature; (3) your purposes in going to college; (4) your particular reasons for choosing Pomona College. It is permissible to discuss the paper with others but the writing, both as to ideas and the form in which they are expressed, must be the candidate's. The letter may be typed if the candidate wishes. The length should not exceed 1,000 words.
4. *Official Transcript* of high school record to date. At the time of selection of candidates, work in progress will be considered in fulfillment of requirements, and admission will be granted subject to the filing of a final transcript showing the satisfactory completion of all secondary school work. The transcript form ordinarily used by the school is satisfactory. It should include an interpretation of the grading system. It should not be sent until the first half of the senior year has been completed.
(In addition to the above, the Scholastic Aptitude test of the College Entrance Examination Board must be taken.)
5. *Medical Certificate*, signed by a licensed M.D., on a form furnished by the college after admission has been granted provisionally. The college reserves the right to reject students on health reasons.
6. *Room Deposit* of \$50 due within thirty days of date of acceptance. This deposit will be held until the student's final semester at which time it will be credited on the semester fees. No refund of the room deposit will be made if a student withdraws before entrance.

Failure to make this payment results in the cancelling of admission. Candidates on the alternate list for whom places are not provided will have the entire deposit refunded.

In addition to the procedure noted above, a candidate for admission to advanced standing must file an official transcript, or trans-

cripts, of all college work for which he has been previously registered and a statement of honorable dismissal from the institution attended.

SCHOLASTIC APTITUDE TEST

All candidates for admission to freshman standing are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board and are held responsible for making application to the Board. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. Students who plan to enter in September are advised to take the test in December, January or March. Either of the three dates is equally satisfactory.

The College Entrance Examination Board will hold five complete series of examinations for 1951-1952. Application to take an examination must be filed three weeks in advance of the examination date. The schedule for the examinations with the dates of registration is as follows:

<i>Examination Date</i>	<i>Final Date for Registering</i>
December 1, 1951	November 10, 1951
January 12, 1952	December 22, 1951
March 15, 1952	February 23, 1952
May 17, 1952	April 26, 1952
August 13, 1952	July 23, 1952

Applicants are required to take the Scholastic Aptitude Test only for admission to Pomona College. It is not necessary to take the Achievement Tests.

Copies of the Bulletin of Information may be obtained without charge from the College Entrance Examination Board. The Bulletin contains rules regarding applications, fees and reports; rules for the conduct of the tests; advice to candidates; descriptions of the tests; sample questions; and lists of examination centers.

Candidates should make application by mail to the College Entrance Examination Board. Students who wish to take the examinations in any one of the following western states, territories, and Pacific areas: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Territory of Alaska, Territory of Hawaii, Australia, and all Pacific islands except Formosa and Japan, should address their inquiries and send

their applications to College Entrance Examination Board, P. O. Box 9896, Los Feliz Station, Los Angeles 27, California.

All others should write to College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey.

Application forms will be sent to any teacher or candidate upon request. When ordering the forms candidates must state whether they wish applications for the December, January, March, May or August tests. Application forms for the December tests will be available early in the fall; those for the January tests will be ready for distribution about November 22; those for the March series January 3; forms for the other two series will be available immediately after the preceding series has been held. A copy of the Bulletin of Information is sent to every candidate requesting an application blank.

Each application to the College Entrance Board should be accompanied by the examination fee of \$6.00.

Candidates are urged to send in their applications and fees to the College Entrance Board at least several weeks before the closing date, since early registration allows time to clear up possible irregularities which might otherwise delay the issue of reports. Under no circumstances will an application be accepted if it is received at the Board office later than one week prior to the date of the examination. No candidate will be permitted to register with the supervisor of an examination center at any time. Only properly registered candidates, holding tickets of admission to the center at which they present themselves, will be admitted to the test. Requests for transfer of examination center cannot be considered unless these reach the Board office one week prior to the date of the examination or earlier.

The Board will report the results of the tests to the institution indicated on the candidates' applications. The colleges will, in turn, notify the candidates of the action taken upon their applications for admission. Candidates will not receive reports upon their test from the Board.

Expenses

TOTAL PAYMENTS by students cover only approximately 75% of the cost of operating the college. Admission to Pomona in itself, therefore, confers upon each student, in addition any special awards he may win, an annual scholarship of approximately \$300. This sum is provided by income from endowment funds and by gifts from those interested in furthering the purpose of the college.

The rising costs of education have greatly increased the average amount spent on each student. The College reserves the right to change any of the following fees at any time should conditions make it necessary.

General Fees

TUITION, including health service, season tickets for Artist Course and Athletic Events	per semester	\$300.00
ASSOCIATED STUDENT DUES	per semester	7.50
GRADUATION FEE		10.00

Residence Fees

ROOM AND BOARD	per semester	340.50
(For men living in Smiley Hall, the charge is \$300.50 per semester. In Clark Hall a few rooms with fireplace are available for men, for which the charge is \$368.00 per semester. Smiley Hall is not open to freshmen.)		
ROOM DEPOSIT, applicable on payment of bills for final semester of residence. (See pages 34, 39.)		50.00
RESIDENTIAL BREAKAGE DEPOSIT, held until a student withdraws from college. (See page 39.)		10.00

Departmental Fees

For exact fees in science and music see Courses of Instruction.

LABORATORY FEES	\$ 2.00 to 10.00
LABORATORY BREAKAGE DEPOSITS	4.00 to 10.00
FEES FOR APPLIED MUSIC	25.00 to 60.00
PRACTICE FEES, APPLIED MUSIC	2.50 to 15.00

Fees for Special Privileges

LATE REGISTRATION (See page 71.)	\$2.00 to 10.00
CHANGE OF PROGRAM (See page 71.)	3.00
SPECIAL EXAMINATIONS	2.00

Fees for Part-time Students

SPECIAL TUITION FOR STUDENTS CARRYING LESS THAN TEN UNITS OF WORK	per unit \$30.00
AUDITOR'S FEE	per course \$10.00

RESIDENCE FOR MEN

The College is equipped with dormitory and dining hall facilities to accommodate most men students and it is expected that men not actually living at home will live and dine in college halls.

Residential campus privileges are provided only on the basis of an inclusive charge varying according to location of room. The standard charge in Clark Hall is \$340.50 per semester, but a few rooms with fireplace are available at \$368.00. The price for room in Smiley Hall is \$300.50 per semester. These charges include necessary furniture, rugs, bed linen and towels, the laundering of the same and the care of rooms. Linens will be changed and beds made in all halls once a week. On the remaining days, men will make their own beds. The only articles to be furnished by the student are blankets, spreads, and study lamps.

RESIDENCE FOR WOMEN

Women students are expected to room in residence halls and board at college dining rooms. Freshmen are required to reside in Harwood Court. Students living at home or working for room and board may make special arrangements with the Dean of Women.

Harwood Court and the two College Houses have both single and double rooms, as well as suites. Except for a few double rooms, single accommodations are provided in Blaisdell Hall and Mudd Hall. Each room is adequately furnished; the only articles to be provided by the student are linen, blankets, and spread for a single bed. Residential campus privileges are provided on the basis of an inclusive charge of \$340.50 per semester.

RESIDENCE REGULATIONS

The residence privilege does not include the use of rooms during vacation periods. The residence halls are open for new students

the Friday before the opening of the college year and for returning students the day of registration. The residence and boarding privileges end 24 hours after the last examination at the end of each semester for all students except seniors and those asked by the college to remain through Commencement. The residence and dining halls are closed the day after Commencement.

Each student is required to make a deposit of \$50 for a room in the dormitory. This deposit is held by the college until the student's final semester in residence, when it is applied on his college bills for that semester. The deposit will be refunded if notice of withdrawal is given not less than sixty days before the opening of the term for which the student is withdrawing.

A residential breakage fee of \$10 is required from each student, from which deductions are made for individual and communal damage to college property, any balance being credited to the student's account on graduation or withdrawal.

The College reserves the right to dismiss from a residence hall without rebate of room rent any student who becomes an undesirable occupant.

The College may dispose of any articles left by students for more than six months.

BILLS

All college bills are due each semester in advance and must be paid by the student at the time of registration. Students wishing to arrange for payment by installments should confer with the Bursar before entering, preferably in the summer preceding registration.

A service charge for deferment will be made as follows:

First semester

Balance payable on or before November 1	\$1.50
Balance payable one-half November 1 and one-half December 1	2.25
Balance payable one-third November 1, one-third December 1, and one-third January 1	3.00

Second semester

Balance payable on or before March 1	1.50
Balance payable one-half March 1, one-half April 1	2.25
Balance payable one-third March 1, one-third April 1, and one-third May 1	3.00

It is expected that payment of installments will be made on or before due dates; failure to do so without the approval of the Bursar will result in an additional service charge.

No refunds are made to those leaving before the end of the term except that in the case of those leaving before the middle of the term because of illness one-half of the tuition and laboratory fees are refunded and in the case of those dropping out for good cause within a week of their registration all but \$25.00 is returned. No refund is made on a room payment unless the room is re-rented to someone not then rooming in a college residence hall.

Students with unpaid bills are not given honorable dismissal or graduated. Seniors must settle all college bills and library obligations by four p.m. of the fourth day preceding Commencement if they are to receive their diplomas with their class.

Scholarships and Student Aid

THE COLLEGE offers an extensive scholarship and student aid program, and approximately \$75,000 will be available to Pomona students for scholarships, fellowships, grants-in-aid, and prizes during 1951-52. These funds are derived from endowments for scholarships and student aid, from individual donations, from the annual Alumni Fund, and from the general college budget.

Scholarships are awarded to students who achieve outstanding academic records and who need financial assistance to attend college. In making awards the Committee on Scholarships considers the candidate's promise in literary, scientific, or other scholastic ability, qualities of manhood or womanhood, force of character, power to lead and to take an interest in the college community, and physical vigor as shown by interest in outdoor sports or in other ways.

Entering students must file scholarship applications, together with the application for admission (\$5.00), by March 15, 1952. Applications should be made on regular scholarship blanks. It is generally understood that candidates for Freshman scholarships will not have attended any other college or university. Candidates need not apply for specific annual freshman scholarships as each student is considered for any award for which he is eligible.

FOUR-YEAR SCHOLARSHIPS

George F. Baker Scholarships: Pomona is one of twelve colleges to receive a grant of \$50,000 from the George F. Baker Trust of New York, for the purpose of awarding scholarships to outstanding young men. The plan of the Baker Trust is to seek out future leaders of American society and to make financially possible for them to attend college. Four or more scholarships will be awarded with stipends which may go as high as \$1250 annually, according to financial need. Open to men students only.

Alumni Scholarships: Five or more scholarships will be awarded from the Alumni Scholarship Fund with stipends which may go as high as \$750 annually according to financial need. Open to both men and women students.

Both Baker and Alumni Scholarships will be renewed for three years if a recipient's performance in college merits a continued award.

The four-year scholarships are awarded not only on the basis of the academic record but also on the all around contribution to the life of the

secondary school and community, and the promise of such contribution college and afterwards. Candidates for these scholarships should be nominated by the principal or headmaster of the secondary school. They are planned primarily for students who will need a substantial amount of financial assistance in order to be able to attend college. They may be awarded, however, to exceptionally promising students who have little if any financial need in which case the stipends will either be nominal or will be withheld entirely. In such an event the number of scholarships will be increased accordingly.

SCHOLARSHIPS FOR FRESHMEN

The following scholarships are available on a competitive basis to candidates for admission to the Freshman Class in the year 1952-53. Half of the stipend is available in the first semester and half in the second semester of the freshman year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better.

The Henry E. Storrs and Julia A. Storrs Scholarships: Two scholarships of \$600 each, open to men.

The Margaret Burton Harwood Scholarships: Two scholarships of \$600 each, open to women. Two scholarships of \$600 each, open to both men and women.

The Thomas J. Dowling Scholarship: One award of \$600, open to a man or woman.

The Henry G. Brainerd and Fannie Howard Brainerd Memorial Scholarship: An award of \$300, open to a man or woman.

College Scholarships: Thirteen scholarships of \$600 each, open to both men and women.

California Scholarship Federation Award: A scholarship of \$600 given to Pomona College to a man or woman nominated by the California Scholarship Federation.

Chemistry Contest Scholarship: A scholarship of \$600 is offered by Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Chemical Society. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

The Physics Contest Scholarship: A scholarship of \$600 is offered to Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Association of Physics Teachers. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

JUNIOR COLLEGE SCHOLARSHIPS

The following scholarships are available for candidates from junior college, for the year 1952-53, half of the stipend being available in the first semester and half in the second semester of the year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better.

Junior College Scholarships: Three awards of \$600 each, open to both men and women.

Alpha Gamma Sigma Scholarship: One award of \$600 given by Pomona College to a candidate who is recommended by Alpha Gamma Sigma.

SCHOLARSHIPS FOR MATRICULATED STUDENTS

The scholarships listed below are available during 1951-52 for students who attended the college during 1950-51, and who have satisfied the matriculation requirements. They are not available to entering students. Half of the stipend is available in the first semester and half in the second semester of the year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better. The degree of financial need is taken into account in the awarding of all scholarships. Applications for these scholarships should reach the committee by May 15.

The Frank G. Butler Scholarships: Four scholarships of \$700 each, awarded to sophomores, juniors, or seniors who have achieved scholastic distinction.

The Olivia Phelps Stokes Scholarships: Three scholarships of \$600 each.

The Alumni Fund Scholarships: Seven awards of \$600 each.

College Scholarships: Twenty-one scholarships from \$200 to \$600 each depending on financial need.

SPECIAL SCHOLARSHIPS

The Charles Harvey Rodi Memorial Scholarship: A scholarship of \$1000, established by Mrs. Lucina Rodi Updegraff, is available annually to a man studying toward a career in medicine. The award is made on the basis of ability and need, and may be available to the same student for more than one year, all at the discretion of the Committee on Scholarships.

The Kappa Delta Honor Scholarship: An annual scholarship of \$450 established in 1926 by alumni members of Kappa Delta Fraternity and administered under a special committee, is awarded at the beginning of his senior year to an outstanding all-around man, who shows qualities of character, intellect, leadership, sportsmanship, and proficiency in athletic pursuits. The recipient must have been in residence during all three lower years, and must rank in the highest third of all the men in his class.

The Phi Beta Kappa Scholarship: A scholarship of \$150 endowed by the Pomona Chapter of Phi Beta Kappa is awarded at the beginning of the second semester to a senior who has been in residence for three years at Pomona and who is selected for the high quality of his scholarship and his promise of future distinction. The award is open to both men and women.

The Nu Alpha Phi Memorial Scholarship: A scholarship of \$450 endowed by the members of Nu Alpha Phi Fraternity and awarded to a man at the beginning of his junior year. Selection is made by a special committee on the basis of outstanding character and real financial need, the latter partially determined by records of student employment during the school year. Given in memory of the Fraternity's losses in World War II.

The Flora Sanborn Pitzer Memorial Scholarship: A scholarship of \$500 from The Sanborn-Pitzer Foundation, established by Russell K. Pitzer of the class of 1900 in memory of his wife, is available to a woman student in the sophomore, junior, or senior class who has shown scholarship ability and who requires financial assistance to remain in college.

The Alice M. Sanborn Scholarship: A scholarship of \$400 annually endowed by the late Alice M. Sanborn, is available to a man selected by the Scholarship Committee as a representative student at the college, not necessarily of the highest scholarship standing, but who has high moral character. The candidate shall be selected at the beginning of his junior year, and shall receive the scholarship for both his junior and senior years in college, provided he shall remain, in the opinion of the Scholarship Committee, worthy of continued assistance. Available for the first time in 1952-53.

The Malcolm Eversole Memorial Fund: A scholarship providing full tuition for a man in the Junior Class to be nominated to the Scholarship Committee by the President of the College at the end of the nominee's second year in Pomona College. The selection is based not on scholastic rank only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character.

The Llewellyn Bixby Memorial Scholarship: A scholarship of \$500 available annually to a man or woman who has completed the freshman year in Pomona College and who shows proficiency and genuine interest in science. Given by Mrs. Llewellyn Bixby, '01, in memory of her husband.

Andrew Acker Sugg Memorial Scholarship: A scholarship of \$300 available annually to a junior or senior man who shows promise of outstanding

work in the field of science. This fund has been established by Mrs. Andrew Sugg in memory of her husband.

The A. L. Hobson Memorial Scholarship: A scholarship of \$500 open to a student from Ventura County, California, who needs financial assistance to attend college. The recipient may be a member of any class at Pomona.

The Donald Houghton Bacon Scholarship: The parents of Donald H. Bacon, who died at the college in 1948, have established in his memory a scholarship fund, the income of which provides an annual award to a deserving student who prepared for college at the Tucson, Arizona, High School, and who is recommended by the Superintendent of Schools in Tucson. If in any year no graduate of the Tucson High School is recommended for the award, it may be made to a senior student at Pomona College, who upon recommendation of the faculty is considered the outstanding member of his class with respect to excellence in class work, athletic ability, and general participation in campus activities.

Bertha Lebus Scholarship: A scholarship of \$300 endowed by Miss Bertha Lebus is available annually to a matriculated student attending the college. The recipient must be a person who shows a high degree of promise and who needs financial assistance.

The John P. Evans Scholarship: A scholarship of \$500 available at Pomona College will be awarded annually to a man who has completed two years at Mount San Antonio College. One half of this sum shall be available for college bills in the junior year; the remainder for the senior year. Candidates for this scholarship, who will be nominated by the Director of Mount San Antonio College, must be of outstanding ability and give promise of becoming good students and leaders among their fellows. The candidate selected must meet regular admission requirements and conditions of competition prevailing at Pomona College.

The Knights Templar Scholarship: An annual scholarship of \$600 is provided by the Knights Templar Educational Foundation, Inc., of the Grand Commandery of California. It is awarded in recognition of those qualities of leadership and of manhood or womanhood which make for good citizenship. It is open to California residents of any Pomona class.

The Associated Men Students Scholarships: The Associated Men Students of Pomona College annually offer the two following awards: (1) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and proficiency in athletics. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year. (2) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and attainment in extracurricular activities. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year.

The Jessie Gibson Scholarship Fund: An Associated Women Students Fund for scholarship awards to members of minority groups who exhibit high qualities of character, leadership and scholarship. The awards will be administered by the A.W.S.

DEPARTMENTAL SCHOLARSHIPS

ART

The Hannah Tempest Scholarships: Two scholarships of \$100 each awarded annually to a man and a woman studying art, in accordance with conditions laid down by the donor, Mrs. Hannah Tempest Jenkins.

ASTRONOMY

The Shatto Memorial Scholarship: A scholarship of \$200 is provided annually from the income of the Walter O. Shatto and Clara R. Shatto Memorial Funds for a qualified upperclassman or graduate student majoring in the Department of Astronomy, the candidate to be selected on the joint recommendation of the department and the Scholarship Committee.

GEOLOGY

The Richard E. Strehle Memorial Scholarship: A scholarship of \$250 from the income of the Richard E. Strehle fund is awarded annually to a junior man with the physical, mental, and moral qualities desirable in a field geologist. Choice is made near the end of the sophomore year, on nomination by the Geology Department to the Scholarship Committee. The award may be withheld in any year, and additional awards may be made in years when extra income is available.

MILITARY

The advanced course of the Reserve Officers' Training Corps consists of Military Science III and IV. Students who have completed the basic course (Military Science I and II) or who are accorded equivalent credit because of military or naval service are eligible for enrollment in the advanced course. Students enrolling in the advanced course enter into an agreement to complete the two year course and attend one summer training camp of six weeks. In consideration of this agreement, students receive from the United States Government cash allowances equivalent to scholarship of about \$310.00 per year. All necessary expenses in connection with camp, including transportation to and from the camp, food, housing, uniforms and medical attention are provided by the government.

Advanced course ROTC students whose attainments in military science are outstanding may be designated by the Professor of Military Science and Tactics as "Distinguished Military Students." A number of distinguished military graduates of Senior ROTC Units may be selected for direct Regular Army appointments.

The number of students admitted to the advanced course is limited by the available appropriation and to that number recommended by the college authorities as being well-qualified to pursue the course. The selection of students for enrollment in the advanced course is based upon excellence

itary training and suitability for appointment as second lieutenants in the infantry branch of the U. S. Army Officers' Reserve Corps. Students who present evidence of above average records while in military or naval service, who have distinguished themselves in the basic ROTC course of this or other schools will receive special consideration in the selection of those students to be enrolled in the advanced course.

MUSIC

The Kate Condit Memorial Scholarship: A scholarship of \$80, endowed by late Mr. and Mrs. A. P. Condit, is awarded annually to an outstanding student in the Department of Music.

The William J. Howard Memorial Scholarship Fund: Established by friends in memory of William J. Howard, '14. A scholarship of \$100 is awarded annually to a student for lessons in applied music.

The Presser Foundation Scholarships: A fund of \$250 is given to the college annually by the Presser Foundation of Philadelphia, for the assistance of music students. Scholarships from this fund are awarded by the Music Department.

PHYSICS

The Richard P. Edmunds Memorial Fund provides a scholarship of full tuition for an upper division man student (preferably one who has attended Pomona during the first two years) nominated to the Scholarship Committee by the Professor of Physics.

FELLOWSHIPS

The following awards may be made for 1952-53 to graduating seniors if qualified applicants appear. Applications should be in the hands of the Committee on Scholarships by March 15, 1952. Should the student selected waive the emolument, the stipend may be paid to the candidate next in rank, while the first student would be designated Honorary Fellow for the year.

The Henry Martyn Bracken Foundation and the *Emily Robinson Bracken Foundation* provide two or more fellowships for graduate work in the Claremont Graduate School. When in any year a graduating senior does not qualify for the award, the stipend may be given to an undergraduate student at Pomona College.

The C. E. and Bertha M. Harsh Memorial Scholarship Fund in the Claremont Graduate School provides income for scholarship aid to Pomona College graduates. Although the Board of Fellows is empowered to make grants from the income for the assistance of any capable and promising graduates of Pomona College attending the Claremont Graduate School, it is the preference of the donors that first consideration should be given to those who are doing advanced work in the Fine Arts.

The William Lincoln Honnold Foundation provides a fellowship with stipend determined by the committee of award according to individual circumstances. The award is open normally only to graduating Seniors who have done four full years of work in Pomona College, who are rated in the upper half of the graduating class on the basis of their performance during both the junior and senior years, and who wish to continue their studies either at the Claremont Graduate School or elsewhere in America or abroad.

The prime purpose of the fellowship is to promote original and creative achievement in the candidate's chosen field of activity rather than merely reward faithful classroom work. Preference will be given to candidates preparing for scholarly rather than professional work. The selection will be based not on scholarship only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character. The plans for graduate work are to be made in consultation between the candidate and the Committee on Scholarships, the committee having final authority. At the end of the year, the Honnold Fellow is to make a full report to the Committee on Scholarships covering the character of his work, impressions of the institution in which he has been residing, his plans for the immediate future and recommendations for the further development or improvement of the fellowship plan.

The Committee on Scholarships also nominates students at Pomona College who wish to apply for awards by other institutions and foundations.

CLAREMONT GRADUATE SCHOOL SCHOLARSHIPS

In addition to the awards for graduating seniors offered through Pomona College, scholarships for graduate work are available at the Claremont Graduate School.

Three Honnold Scholarships, two of \$750 each, and one of \$500 are awarded in the field of Oriental Affairs. General scholarships of \$600 each are available for work in the field of the candidate's choice. A few graduate assistantships with a stipend of \$600 and half tuition in the Claremont Graduate School are available through Pomona College and Scripps College.

STUDENT AID

In addition to the scholarship awards, the college makes grants in-aid available to students doing satisfactory academic work who require financial assistance to continue at Pomona. To this end the income of certain endowed funds is supplemented by a budgetary appropriation. Such aid is normally given only to students who have completed one year in Pomona College, who are or intend to



No student ever forgets the snow-capped grandeur of Old Baldy.

Holmes Hall and College Gate.





Entrance to Mudd and Blaisdell Halls — Residences for Women.

A room in one of Pomona's three modern residence halls for women.





Courtyard in the Eli P. Clark Residence for Men.

Values in living are gained from dormitory life at Pomona.





Science has a prominent place in the program at Pomona.

The Westergaard Room in the Library houses choice books in Art.



become candidates for a degree from Pomona College, who maintain a high standard of honor, who are economical in their habits, who are regular in their attendance upon college exercises, and who maintain at least C grade in their scholastic work. Recipients of grants-in-aid are expected to earn part of their college expenses by employment during vacations and term time.

Aid may be withdrawn at any time from students who prove not to have conformed to the conditions.

If a student who has received a grant-in-aid transfers to another institution of comparable cost before graduation the total sum granted him by Pomona College will become a loan, repayable according to the terms applicable to regular student loans.

It is customary to extend loans only instead of grants to students who are in the second semester of the senior year.

All applications for aid should be made to the chairman of the Committee on Scholarships and Student Aid, Sumner Hall, before May 1 for the first semester of the following academic year, and before January 15 for the second semester of the current academic year.

STUDENT AID FUNDS

The income from the following funds is available for student aid:

The Francis Bancroft Memorial Fund of \$1500, given by Mrs. James T. Bancroft in memory of her father.

The L. H. Barrows Fund of \$2500.

The H. G. Billings Memorial Fund of \$1000.

The Florence G. Bixby Fund of \$5000.

The Hagop Bogigian Fund of \$31,402.

The Sherlock Bristol Memorial Fund of \$400.

The Bessie A. Brown Memorial Fund of \$800, given by Mrs. Fannie E. Brown.

The Henry Herbert Brown Memorial Fund of \$1000 given by Mrs. Fannie E. Brown in memory of her son.

The Class of 1918 Fund, \$961.

The Charles C. Cragin Memorial Fund of \$5025, given by Mrs. Laura E. Cragin in memory of her husband, Rev. Charles C. Cragin.

The Agnes K. Crawford Memorial Fund of \$1000, given by David R. Crawford and William Crawford in memory of their mother.

Ebell Club of Pomona Student Aid Fund of \$1000. To help a poor student.

The Elwood Fund of \$2600, given by Mary E. Elwood.

The Ford Fund of \$2500, given by Rev. James T. Ford.

The Margaret Fowler Fund of \$1000.

The Orren A. Gorton Fund of \$5000.

The Emma K. Guild Fund of \$44,887.

The Manette Hand Memorial Fund of \$1500.

The Alfred James Harwood Memorial Fund of \$8000.

The Charles E. Harwood Fund of \$5000.

The Thomas F. Howard Memorial Fund of \$3500, given by Dr. Mrs. H. G. Brainerd in memory of Mrs. Brainerd's father.

The Mary Marvin Janes Fund of \$679.

The Helen Day Jewell Fund of \$1000.

The Henry L. Kuns Fund of \$2000.

The Jean Loomis Fund of \$2000.

The Howard J. Mills Memorial Fund of \$3000.

The Ontario Congregational Church Fund of \$186, given by the Ontario Congregational Church toward the endowment of a fund.

The Page Fund of \$5000, given by Mrs. Loraine H. Page. (Three thousand dollars of this may at some time be used for other purposes.)

The Arthur Warren Phelps Memorial Fund of \$2000, given by Mrs. C. Phelps and Mr. C. A. Phelps in memory of their son and brother.

The Lydia Phelps Memorial Fund of \$4000.

The Pilgrim Church of Pomona Fund, \$2002, given by the Pilgrim Congregational Church of Pomona.

The Pilgrim Church Women's Auxiliary Fund of \$556, given by the Women's Auxiliary of the Pilgrim Congregational Church of Pomona.

The John D. Potter Memorial Fund of \$2000, given by Mrs. S. T. Potter in memory of her husband.

The Anna H. Searing Fund of \$1800.

The Clyde H. Shields Memorial Fund of \$2000, given by R. P. Shields in memory of his oldest son.

The Lucia Glidden Strong Fund of \$911.

The Sweet Memorial Fund of \$2500, given by Harlan P. Sweet in memory of his wife.

The Maria T. Wardwell Fund of \$1000.

The Clara B. Waterman Memorial Fund of \$5000, given by Miss Rosa May Bennett.

The Henry S. West Fund of \$2000.

SPECIAL FUNDS

The Crombie Allen Scholarship Fund of \$1000, half of the income available annually to a graduate of Chaffey Union High School and half to a graduate of Chaffey College of Ontario, California.

The Martha E. Berry Memorial Fund of \$6000, for foreign students.

The Mabel S. Bridges Memorial Fund of \$3500, available for women.

The Alice Paul Harwood Scholarship Fund of \$5000, open to graduates of Chaffey Union High School of Ontario.

The Stella M. King Scholarship and Loan Fund for Women, \$10,000.

The Francis M. Price Fund of \$1000, for children of missionaries.

LOAN FUNDS

The college also administers loan funds by which it is possible to cooperate with the urgent need of students in making available to them amounts sufficient to cover tuition fees. Interest at the rate of 4% per annum begins on graduation or at the time of leaving college. Loans from the following funds may be available, applications for which should be addressed to the Committee on Scholarships and Student Aid.

General Loan Fund of \$71,472.

The Caroline Phelps Stokes Fund of \$25,000, endowed by the will of Julia Eggleston Phelps Stokes in memory of her sister, income from which is available for loans.

The Ethan Allen Chase and Augusta Field Chase Fund of \$6538, available for men.

The Ray Loan Fund of \$1561, given by Mrs. E. F. Ray, to provide a means of meeting situations of temporary need.

The David Clark Fund of \$1162.

The Robert C. Denison Memorial Fund of \$581.

The Lucy B. Jencks Memorial Fund of \$419, established by the Claremont Chapter of the D.A.R., available for a senior girl designated by the Dean of Women.

The Edwin C. Norton Memorial Loan Fund of \$1575, available for undergraduate students, or for graduates of the college who wish to pursue advanced work in other institutions.

The C. F. Baker Memorial Loan Fund of \$216, available for undergraduate students, preferably juniors or seniors, in the departments of Botany and Zoology, who are approved by the heads of those departments.

The A. G. McKenna Loan Fund of \$2940, available to graduating seniors for advanced work at the institution of the student's choice.

The Anna Bruce Memorial Loan Fund for Women, of \$520.

The Associated Women Students Loan Fund, administered by the Dean of Women at the request of the Associated Women Students, makes available for women students short term loans for personal emergencies. It is normally used for loans to meet college bills. Interest at the rate of 4% begins after a period of two years.

The Associated Men Students Loan Fund, established in 1931, is available for loans in small amounts to meet personal emergencies or short-term personal needs of Pomona men. It is not intended to be used to pay college bills. For a special need a loan may be issued on a long-term basis. The interest rate is 4%. The fund is administered by the Dean of Men at the request of the Associated Men Students.

STUDENT EMPLOYMENT

The College endeavors to find employment for students needing to earn part of their expenses. Many are thus helping themselves by various forms of labor such as baby sitting, janitor work, waiting on tables, general house work and gardening.

Applications for aid in securing employment should be addressed to the Director of Placement Service, Sumner Hall.

PRIZES AND AWARDS

GENERAL

The following prizes and awards are available for general accomplishments and for proficiency in the work of the several departments:

The Rena Gurley Archibald High Scholarship Prize: A prize of \$40 is awarded to that member of the graduating class taking the B.A. course and ranking highest in scholarship was established by the bequest of the late Reverend Andrew W. Archibald, D.D.

The Arvid Pierre Zetterberg Award: From a fund endowed by Mr. and Mrs. A. P. Zetterberg in memory of their son, Lt. Arvid Pierre Zetterberg, an annual award of \$50 is made to the sophomore man who during his freshman year exemplifies the highest qualities of character, scholarship, and interest in many sports. The award is made on nomination of the Scholarship Committee and is presented at the Opening Convocation in September.

ART

The Rembrandt Club Art Prizes: A first prize of \$25, and a second prize of \$10, are awarded by the Rembrandt Club for excellence in drawing and design, in work presented for the annual student exhibition.

The Rembrandt Club Art History Prize: A prize of \$10 is given by the Rembrandt Club for the best paper presented in the course in History of Art.

ASTRONOMY

The Moncrieff Astronomy Prize: A prize given to the student in the first year course in Astronomy, taken regularly in class, whose interest in the study and proficiency in the observatory work are indicated by the best notebook kept in accordance with the teacher's suggestion. A prize of \$20 is given by Miss Flossie C. Moncrieff, '11.

BIOLOGY

The Vaile Prize: A prize of \$15 to be awarded to an outstanding student in Botany or Zoology was endowed by the late Mr. Charles S. Vaile.

CHEMISTRY

An annual prize of \$25, established by an anonymous donor, is awarded at Commencement to the graduating senior whose overall college work in chemistry shows the greatest promise for creative research.

CHEMISTRY-GEOLOGY

The James A. Lyman Prize: A prize of \$100 awarded at the beginning of the college year to a senior student majoring in chemistry or geology who, in the opinion of the chemistry-geology faculty, shows special promise of achievement in research or teaching, or both. Established in memory of Dr. James A. Lyman, Professor of Chemistry 1909-1926, by his son, Dr. George F. Lyman, '26.

EDUCATION

The Ada May Fitts Education Prize: A prize of \$50 endowed by Mr. Charles T. Fitts in memory of his wife, Ada May Fitts, is awarded annually to a student for excellence in courses in the Department of Education and for unusual promise in the educational field.

ENGLISH

The John Dye Award: From a fund established by Mr. and Mrs. John Thomas Dye in memory of their son, John Thomas Dye, III, who was a Lieutenant in the Army Air Corps, is offered an annual award of \$100 for the best piece of original writing to appear in a student publication. The award is announced at Commencement time.

The F. S. Jennings Memorial Prizes: Three prizes for men and three prizes for women of \$50, \$40, and \$30, respectively, for excellence in English are available each semester to members of the Freshman class taking English. In the award of these prizes attention is given to the interest shown by student in improving the quality of his written and spoken English.

GOVERNMENT

The Edward M. Sait Prize: A prize of \$5 for the purchase of a book relating to American or comparative government, or for a membership in the American Political Science Association, is awarded to the student doing the best work in the basic course in government.

The Russell M. Story Prize: A prize of \$5 for the purchase of an appropriate book, or for a student membership in the American Society for Public Administration, is awarded to the student doing the best work in the course in public administration or in state and local government.

The George S. Burgess Prize: A prize of \$5 for the purchase of an appropriate book, or for a subscription to a selected law review is awarded to the student doing the best work in the course in legal history or constitution law.

INTERNATIONAL RELATIONS

The Cordell Hull Prize: An award of \$50 is offered annually to the student who submits to the committee on International Relations the best essay on a problem relating to the United Nations. Subjects must be cleared with the secretary of the committee on or before April 1, and the essay between 2500 and 3000 words in length, must be submitted in triplicate on or before May 1. In case no one essay is of outstanding merit, the committee reserves the right either to divide the honors or to make no award.

LATIN

The Mudge Latin Prizes: First and second prizes of \$10 and \$5, respectively, for excellence in Latin are endowed by friends of the College.

LIBRARY

The Eda May Haskell Library Prize: A prize of at least \$15 in the form of a purchase order for books is offered for the best library submitted by a senior student, not necessarily for the largest or most expensive collection but for the most intelligently selected books in one or more fields of the student's interest.

MATHEMATICS

The Llewellyn Bixby Mathematics Prize: A prize of \$10 for excellence in Analytic Geometry and Calculus; open to all students completing both Mathematics 1 or 52 and 65.

MUSIC

The Barbara Sanford Allen Prize: An annual competitive prize of \$50 to be awarded to a student in the department of music, above freshman rank.

is award is made possible by the husband and parents of a graduate of the class of 1915 of Pomona College.

PUBLIC SPEAKING

The Kinney Declamation Prizes: A prize declamation contest open to members of the Freshman class occurs early in the second semester. First, second, and third prizes of \$25, \$20, and \$15, respectively, are endowed by S. H. N. Kinney.

The Dole Debate Prizes: A prize debate for lower-division men is held near the close of the second semester. First and second prizes of \$30 and \$20, respectively, established by the late Mr. John H. Dole in memory of his father, Mr. William B. Dole, are endowed by Mr. Arthur M. Dole, '96.

The Stella King Prizes: The opportunity to compete for prizes totaling \$100 for speeches of their own composition is offered to upper-division students. The judges have the right to distribute the prize money among contestants as they see fit, or to withhold all awards if they feel warranted in so doing. These prizes were endowed by the late S. H. Wheeler, in memory of Miss Stella King.

RELIGION

The Hager Prize: A prize of \$10 for the best essay on a foreign missionary subject, open to all students, was endowed by the late Mr. and Mrs. C. R. Hager.

General Information

LIBRARY

AT PRESENT the library contains 123,856 volumes and 167,000 government documents. It receives subscriptions to 70 periodicals and maintains bound files of approximately 550, many of which are complete. Especially valuable are the periodical holdings in the field of natural science. The library is a depository for U. S. Government Documents and the publications of the Carnegie Institution.

The following special collections are a part of the general library: the Cook-Baker Biological Library and the Parish Botany Library in Crookshank Hall; the James A. Lyman Memorial Library in Chemistry and the Geology Library in Mason Hall; and the Mathematics and Physics Library in Pearsons Hall. Housed in the main building are the Mason California, the Wagner North Pacific Libraries, and the Viola Minor Westergaard and Carnegie A. Collections.

A staff member is on duty to assist students at all hours while the library is open. Most of the books are on open shelves where students may consult them at all times. With the exception of reference books, periodicals, and rare volumes, books may be borrowed for two weeks. Certain books in great demand for class use are placed on reserve, subject to special circulation rules.

The library is open to the students and faculty of the Associate Colleges and to the residents of Claremont.

In addition to the Pomona College Library there are also available the libraries of Scripps College, the Claremont Graduate School, and Claremont Men's College. The Scripps College Library of approximately 40,000 volumes is housed in the Ella Stron Denison Library. It contains in addition to its general collection the Macpherson Collection of books about women, and the Stephenson Memorial Collection of American History. The library of the Claremont Graduate School, located in Harper Hall, contains approximately 60,000 volumes, including the Oriental Library, the Library of the Americas, and the George Burton Adams Collection of English History.

PUBLICATIONS

The stated publications of the College are issued as numbers of the *Pomona College Bulletin*, which is published monthly except July and August. These include: the *Annual Catalog*, the *Report of the President*, and the *News Letter* for Alumni.

LECTURE FOUNDATIONS

The Joseph H. Johnson Foundation, liberally endowed by Miss Helen B. Scripps, provides an annual income for the purpose of furnishing to the College for a protracted stay and intimate participation in college life notable educators from other institutions. By this means such educators are annually in residence in Pomona College.

The Henry D. Porter Foundation, named in honor of the late Rev. Henry D. Porter, for many years a missionary in China, secures for the institution annually the extended stay of some prominent worker in the field of Christian Missions. The lecturer upon this foundation commonly shares in the regular classroom work related to the history, geography, politics or religion of the region from which he has come.

The Clark Foundation, established by Mr. Arthur O. Clark, makes it possible for the College to offer each year a lecture or course of lectures in the general field of religion.

PUBLIC ASSEMBLIES

On Thursdays at 11 a.m. General Assembly is held for the purpose of hearing visiting lecturers or members of the faculty discuss topics of interest to the whole institution. This assembly period is also used for student body and class meetings.

On five stated occasions throughout the year, including the opening of each semester, College Convocation is held. Full attendance of both faculty and students is expected at these exercises.

RELIGIOUS ACTIVITIES

The four Associated Colleges at Claremont unite in a College Church which holds its services each Sunday morning at eleven o'clock in Bridges Hall of Music. The Church is the coordinating center for religious activities among the colleges. Students partici-

pate in the services and there is a special student choir for the Church.

The College Chapel, which is altogether a service of worship held every Tuesday morning from 11:00 to 11:25 in Bridges Hall of Music. Both students and faculty participate in the program, which attendance is voluntary.

Various expressions of religious interest and forms of religious activity exist on the Pomona campus: worship, study and discussion groups, campus and community programs of service, and contacts with intercollegiate enterprises. These interests and the sponsoring organizations are united in the Pomona College Christian Association as a central, campus-wide agency to encourage interest in religion and to develop religious activities.

The Association maintains relationships with the national Student Christian Movement and the World Student Christian Federation. Through one of its committees it joins with the College in sponsoring the weekly Chapel service. Under its or the College auspices, or that of both, certain occasions of special religious emphasis are provided during the course of the academic year: seasonal celebrations, retreats and conferences, visitations to the campus by prominent religious leaders.

Opportunities for Sunday morning worship are also available at the Claremont churches which welcome the participation of students in their activities.

MUSIC

The College cooperates with Scripps College, Claremont Men's College, and the Claremont Graduate School in the presentation of music in the Bridges Auditorium of the most distinguished masters in the field of music. Regularly included in the series is the Los Angeles Philharmonic Orchestra, under the direction of Alfred Wallenstein.

For the concerts thus afforded an annual ticket is furnished every full-time student without extra charge.

Under the auspices of the Pomona College Department of Music complimentary public recitals by individual students and members of the faculty and by groups are given frequently throughout the year. These are usually given on Monday evenings.

The College Symphony Orchestra, the Choir, the Band, the Men's

Women's Glee Clubs, and chamber music groups, afford opportunity for the study and public performance of the finest in ensemble music.

CAMPUS ORGANIZATIONS

Associated Students. This association coordinates all student activities. Its officers are chosen by the student body from among their own number. All important questions are first considered by the Executive Council, a governing group composed of class presidents and chairmen of other organizations representing various activities of campus interest. These students are responsible not to the organizations which they represent on the Executive Council to the Executive Council itself.

Associated Men Students and Associated Women Students. These organizations consider and promote the special interests of the men and women respectively.

Class Organizations. Each of the four college classes is organized for the purpose of promoting class social life.

Phi Beta Kappa. The Pomona Chapter of Phi Beta Kappa is the chapter of California. Upperclassmen "who are of good moral character, who are candidates for the degree of Bachelor of Arts, and who are distinguished for breadth of culture and excellence of scholarship" are eligible to membership in the Phi Beta Kappa Society.

Honor Societies. Ghosts; Mortar Board; Gamma Chapter of Alpha Kappa Delta, Sociology Fraternity; California Alpha Chapter of Kappa Mu Epsilon, National Honorary Mathematical Fraternity.

Departmental Organizations. El Circulo Español, Le Cercle Français, German Club, Caduceans, Economics Club.

Musical Organizations. Men's Glee Club; Women's Glee Club; Glee Club, Symphony Orchestra, Chamber Music Groups, Band.

Religious Organizations. The College Church of the four Associated Colleges and the Pomona College Christian Association, which is composed of various committees for religious worship, study, and service.

Miscellaneous Organizations. Drama Productions Committee; Masquers and Thespians, in Dramatics; MSS, literary magazine; Orchestis, in Dancing; Camera Club; Ski Club; Women's Recreational Association.

Local Social Fraternities. Alpha Gamma Sigma; Kappa Delta; Kappa Theta Epsilon; Nu Alpha Phi; Phi Delta; Sigma Tau. Each fraternity has a club room in one of the residence halls on the men's campus. Approximately one-third of the men students belong to the fraternities which pledge new members during the sophomore year. There are no sororities on the campus.

STUDENT PUBLICATIONS

The *Student Life* is published twice a week by the student body and is devoted to campus affairs.

The *Metate* is the yearbook published by the Associated Students.

The *Sagehen*, a magazine of humor, appears three times a year.

The *Hand Book*, which contains material designed especially for new students, is issued at the beginning of the year by the Associated Students.

SUPERVISION OF CONDUCT

Pomona College assumes that most of the matters which affect the college are of concern to both faculty and students and believe that the experience and the judgment of both should be taken into account in the management of much of the college life. For this reason a large number of the policy forming committees of the college have both faculty and students as voting members. These committees now include the following: Athletic Council, Personnel, Religious Activities, Student Affairs and Vocational Counsel and Placement.

Pomona College assumes that its students, having voluntarily enrolled in the college, are in sympathy with its purposes and philosophy, and will abide by its accepted practices. This basic philosophy is that all members of the college community should govern their conduct by standards of good taste and ethical judgment. Any behaviour on or off the campus which may bring

credit to the individual or to the College may result in disciplinary action.

The use or possession of alcoholic liquors of any kind on the campus is prohibited by the college.

The faculty has placed the interpretation and execution of these policies in the hands of the Committee on Student Affairs which consists of the deans and certain faculty members appointed by the President. Under this Committee as a policy-making body are the College Life Council, composed of six faculty members appointed by the President and nine student members elected partly by the student body and partly by the Executive Council of the Associated Students.

At the present time the College Life Council has been delegated the responsibility for the administration of discipline, for dealing with inter-class rivalry, for supervision of fraternities, for regulations governing the use of automobiles, and for dealing with infringements of academic honesty and honor. It is probable that additional responsibilities will be assigned to the College Life Council from time to time.

The Judiciary Committee of the Associated Women Students and the Judiciary Committee of the Associated Men Students administer regulations concerning conduct in the residence halls on their respective campuses, and, acting together as a joint body, carry out the policies of the College Life Council and act as a court in matters of discipline, except in those which are judged by the deans to involve serious problems of personality adjustment. Individual or collective student enterprises which use the college name and involve the absence of the participants from the college must receive the official sanction of the Committee on Student Affairs.

AUTOMOBILES

Rules governing the use of automobiles are formulated and administered by the College Life Council. Students maintaining cars in Claremont are subject to the following regulations:

Ownership of the car, together with its license number, must be registered with the office of the Dean of Men or the Dean of Women at the opening of college or within three days after the car is driven in Claremont.

Student drivers must at all times, both on and off the campus, exercise particular care and consideration for the safety of themselves and others, and must acquaint themselves with the state and local traffic laws and comply with their observance.

Failure to comply with the above regulations shall constitute an offense against the college, the penalty for which may include sequestration and storage of the car at the student's risk and expense for a period not beyond the end of the term in which the offense occurs.

MEDICAL AND PHYSICAL CARE

Pomona College, in cooperation with Scripps, Claremont McKenna College, and the Claremont Graduate School, engages the full-time services of a physician to care for its students. Dr. Gilbert Coltrin, who has held this position since 1940, is a graduate of Pomona College and the University of Rochester Medical School.

The medical advice of the College Physician is ordinarily available, free of charge, to all students, subject to certain conditions of hours and location of residence. Minor ailments are treated in the Physician's office or at the Infirmary, used for cases requiring nursing and certain types of hospital care. All surgical dressings and medicines are at the expense of the ill or injured as is a medical service in chronic or prolonged illness or in case of accident, or an acute illness beyond ordinary first-aid emergency treatment. The college nurse visits the residence halls each morning in order to see those students reported ill.

The student is entitled to two days each semester at the College Infirmary without charge for room and meals. If illness requires hospitalization for additional days, the charge is five dollars per day. The College, however, reserves the right to discontinue the individual medical service at any time, without previous notice.

The College does not assume responsibility for the complete medical care of all its students, but only in so far as its present facilities will afford. Preventive medicine and campus health functions are stressed in the college medical program.

The College has completed arrangements by which its students may purchase group health and accident insurance at special rates and it advises students to avail themselves of this opportunity. Detailed information about this insurance may be secured from the Dean of Students or from the College Physician.

For curative treatment, students have ready access to the College Health Service and to the consultants among the leading physicians of Claremont and Pomona. However, complete service is not financed by the college.

When specialists, consultants and special nurses are required, such services will be met by the student. In any illness the student is free to employ his own physician on a private fee basis.

Students are expected to conform to the medical regulations of the college.

PHYSICAL ATTENTION

The physical care of students is a matter of special concern to the college. Every student on entering is given a physical examination under the direction of the College Physician. This examination is required of all incoming students. The medical certificate required of all applicants for admission includes a certificate of recent successful small-pox vaccination and a certificate of a satisfactory tuberculin test, or an x-ray of the chest, performed within the preceding six months. Any student, while in college, may be required to present each year a follow-up certificate of examination for tuberculosis. Regular work in physical education is prescribed throughout the four years, and courses in physiology, and hygiene are given. Supervision is given to athletics throughout the college career.

ATHLETICS

Pomona College and Claremont Men's College unite to conduct a joint program of intercollegiate athletics, under one coaching staff, as a member of the Southern California Intercollegiate Athletic Conference. Our teams, known as the "Sagehens," compete in football, basketball, track and field, baseball, cross country, swimming, golf and tennis.

In addition to the program of intercollegiate sports the College maintains an extensive program of intra-mural sports open to all college students.

The direction and financial management of athletics rest with the Director of Athletics, who has associated with him as an advisory body the Athletic Council, composed of three members of the Pomona Faculty, one member from the Claremont Men's College Faculty, three student members from Pomona and two student members from Claremont. Under the general manager, there is a student manager for each sport.

The college endeavors to safeguard students in the use of physical education facilities, athletic fields, and gymnasiums, and to this end the department has established regulations concerning the use of such facilities, but it is clearly understood that students who use the same do so entirely at their own risk.

PSYCHOLOGICAL CLINIC

The Associated Colleges maintain a Psychological Clinic under the direction of a Clinical Psychologist. The Director of the Clinic, Dr. Evelyn Troup, works in conjunction with the college physician, Dr. Coltrin, and with Dr. Mehl McDowell, a psychiatrist. The Clinic offers remedial instruction, vocational testing and consultation and counseling on personal and emotional problems. Most of the services are open to Pomona students without charge, including one consultation with the psychiatrist. The cost of any additional consultations with the psychiatrist must be met by the student.

VOCATIONAL COUNSELING AND PLACEMENT

Through faculty advisers and the personnel services of the college, students receive assistance in their choice of a career. The college maintains a vocational counseling and placement service for the benefit of alumni and students. Many alumni cooperate with the Director of the Placement Service, who is also Alumni Secretary of the college, in assisting seniors and graduates to find employment.

This service aims to provide reliable occupational information concerning representative business organizations, government agencies, the professions, and other opportunities for employment. The office of the Director of Placement Service is in Room 212, Sumner Hall.

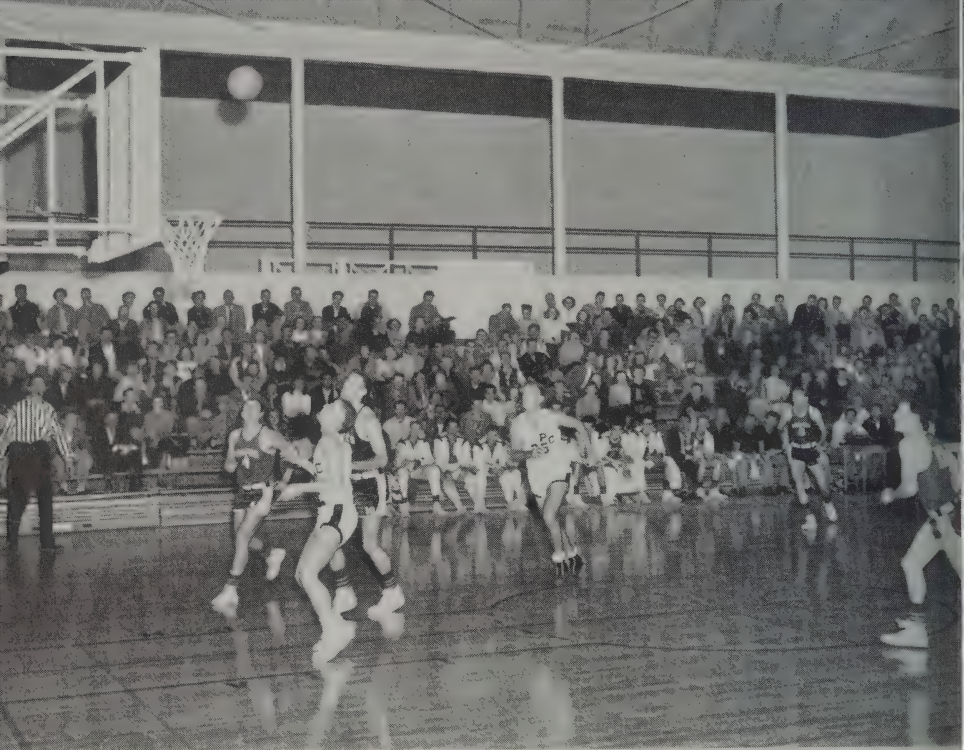
Each year public conferences on modern careers for men and women are held on campus under the sponsorship of the faculty and student committees on vocational counseling and placement and also by individual departments. These round table discussions permit students to hear an organized presentation of twelve or more different vocational fields each year, and to ask questions during the sessions, as well as to meet the distinguished guest speakers at dinner. This series is opened by a special all-student assembly each year on ways of finding one's work in the world.



Marston Quadrangle on Alumni Day.

The Edmunds Union serves as a campus social and recreational center.





The new Memorial Gymnasium affords excellent athletic facilities.

Pomona has maintained since 1919 a voluntary unit of the ROTC.



The Associated Students include in their budget support for the Vocational Information Center which is maintained in the Pomona College Library, with information on vocations in this country and opportunities for placement abroad and for foreign study. Information on scholarships and fellowships for graduate study is made available to interested students by the Dean of Students and through the Vocational Information Center, as well as by department offices.

Students are given the opportunity to take vocational interest tests, and to consider the results with the Dean of Men or the Dean of Women or with other faculty advisers. Deans and advisers are available throughout the year to discuss with students their choice of academic fields of concentration as well as their vocational and personal goals.

SUMMER SESSION

The Claremont Summer Session is sponsored jointly by the Claremont Graduate School, Pomona College, Scripps College, and Claremont Men's College. A Bulletin describing summer work is issued annually. Requests for information should be addressed to the Director of the Summer Session, Harper Hall, Claremont, California.

The Curriculum

ALTHOUGH THE TRADITIONAL CONTENT of the liberal arts curriculum has been modified in recent years to meet the needs developed by social, scientific, and technological changes, the modern program in liberal arts and sciences has in common with its predecessors a traditional function: to prepare students for a society which expects of them leadership in diverse roles and offices, humble or great. Today, as in the past, the purpose of Pomona College is to help its students toward a life in which professional achievement is accompanied by personal happiness, cultural balance, and social responsibility. Its program, therefore, includes both courses intended for general education and courses designed for specialized study and preprofessional training.

The immediate objective of general education, as expressed in the course requirements of the College, is to help the student in the development of:

1. Ability to use the English language effectively, in reading, writing, and in speech.
2. Acquaintance with scientific thought and method.
3. Acquaintance with the historical development of our civilization.
4. Acquaintance with and understanding of human society, problems and its institutions.
5. Acquaintance with literature and the fine arts.
6. Appreciation of ethical and spiritual values.

With these purposes in mind, the College requires that certain courses be taken in the Freshman and Sophomore years.

To secure the benefits of intellectual discipline derived from concentrated study, and at the same time, in many instances, to prepare for professional training after graduation, every student upon entering the Sophomore year is required to select a field of concentration in which he will complete not less than twenty-four units of upper-division work during his Junior and Senior years.

the field of concentration may be represented by one department may extend beyond departmental limits to include closely related subjects. For students of outstanding ability and well-defined interests, the field of concentration may be developed into a program of honors study. These requirements and programs of study are described in detail in the following pages.

SUMMARY OF REQUIREMENTS FOR THE DEGREE

Pomona College awards only the bachelor of arts degree. Commencement honors are awarded (1) on the basis of the over-all average of the student's work, and of the comprehensive examination, and (2) on the basis of the completion of a program in Honors Study." These honors are further described on page 85.

Units: One hundred and twenty-six units (semester-hours) of work are required for graduation. A "unit" consists of one recitation or lecture period, or one laboratory period a week for one semester. A recitation or lecture period covers fifty minutes; a laboratory period covers, in general, the time of three such periods. In order to complete the course in eight semesters one must take each semester an average of fifteen units of work exclusive of physical education activities.

Grade Points: In order to graduate, a student must not only earn a certain number of units, but also attain an average of at least C grade in all units in which he has registered, or twice as many grade points as units. An explanation of the grading system will be found on page 69.

Residence: A minimum of four semesters in full-time attendance is normally required for graduation. All students are required to complete the final two semesters in residence unless individual exceptions are made by the Classification Committee.

Lower Division Requirements: All students must satisfy the requirements for distribution in the Lower Division as explained on page 72. These requirements should normally be met in the Freshman and Sophomore years, but completion may be postponed to the Junior year. Postponement to the Senior year requires the permission of the Classification Committee.

Upper Division Requirements: In the Junior and Senior years all students must undertake a program of concentration leading to a comprehensive examination or its equivalent.

Physical Education Activities: Physical Education Activities must be included in the registration of each student every semester, in accordance with the student's classification, until a maximum of six units has been completed. Freshmen and Sophomores register for two activities each semester,

and Juniors and Seniors one activity. Exemption from this requirement possible only by permission of the Classification Committee on the recommendation of the College Physician. Transfer students who met the Physical Education requirement of the institution from which they transferred need take only the amount required for their classification.

American History and Institutions: To be eligible for graduation students are required by the laws of the State of California to pass examinations in American history and in American institutions, including the provisions and principles of the United States Constitution. While courses are helpful in preparing for the examinations, it is not possible to satisfy the requirements by the passing of any Pomona College course or courses. Examinations to satisfy these requirements will be given semi-annually in September and in the spring on dates which will be announced well in advance. Each candidate will be examined once without fee, but if he fails to pass the first time, re-examination will be given only upon presentation of a receipt from the Business Office for the payment of the usual \$2.00 fee for special examinations. Candidates who have failed once, however, must take re-examinations at the times scheduled for the regular examinations. These examinations will be objective in character and students should be able to achieve a satisfactory grade in each on the basis of a reading of a standard text book. This requirement must be met not later than the beginning of the junior year, and preferably as early as possible in the student's undergraduate career. Any student who has not satisfied the requirements by the beginning of his junior year will not be considered to be in good standing until they have been fulfilled. Reading lists for those preparing for the examinations are obtainable from the departments of History and Government. Members of those departments will offer a series of public lectures each spring which will be mature interpretations of the subject, but they will not in themselves provide all the factual information necessary to pass the examinations. Students failing an examination are advised to take the course in that field before attempting it again.

Foreign Languages: Although the College does not specify a knowledge of a foreign language as a requirement for the degree, several departments include this requirement in their programs of concentration. The student should ascertain the language requirement of whatever program of concentration he is planning to undertake, and, if he is not already prepared to meet it, should include the study of the required language in his Freshman and Sophomore years.

Graduation Fee: Every student expecting to graduate at the end of a given semester must file an application for graduation at the Registrar's Office not later than the beginning of his final semester and must include the graduation fee (\$10.00) with the payment of his other fees at the time of subsequent registration. Failure to comply with these two requirements will automatically exclude a student from graduation that semester.

ACADEMIC REGULATIONS AND PROCEDURE

GRADES AND GRADE POINTS: In order to graduate, a student must earn twice as many grade points as units; that is, an average of at least C grade in all units for which he is registered. Grades and grade points are as follows:

- A (excellent) = 4 grade points per unit.
- B (very good) = 3 grade points per unit.
- C (average) = 2 grade points per unit.
- D (passing) = 1 grade point per unit.
- F (failure) = 0 grade points per unit. May be made up to a D.
- FF (failure) = 0 grade points per unit. May not be made up except by repeating course.
- I (incomplete due to illness)
- W (withdrawn with permission)

All F, FF, and I grades reported by instructors must be accompanied by a specific statement in writing of the reason for the grade. In case of an F or I grade, the statement must include a detailed explanation of how the grade can be made up. A copy of this statement is given to the student. The conditions for removing I and F grades must be met within seven weeks of the beginning of classes of the following semester, except that, in certain other courses, the deficiency in the first semester may be removed by successful completion of the work of the second semester, if the instructor so recommends. An F grade cannot be raised above a D. I and F grades not satisfactorily made up within this time limit automatically become FF.

The I mark is given where illness on the part of a student justifies the granting of additional time for the completion of work. It may be changed to whatever grade the student earns. Instructors wishing to give an I grade to a justifiable cause other than illness must first receive permission to do so from the Classification Committee.

A FF grade can be made up only by repeating the course. Where the FF or permanent F grade is incurred in a Physical Education activity, the same course must be repeated when next offered. A student may not continue in the same course other than Physical Education in which he has received a FF in the first semester. The making up of work which has received the permanent FF or FF grade does not expunge the grade from the record. Credit and grade points are, however, allowed for the repeated work.

The mark W is used where a student has withdrawn from a course in accordance with the provisions outlined under "changes."

Amount of work: The College regulates the amount of work a student must carry as follows:

The normal registration is 15 units of academic work plus Physical Education activities and/or Military Drill. In addition a student may elect for credit any one of the following: Band, Choir, Orchestra, Chamber Music or Play Production.

To register for 17 units of academic work a student must have earned more grade points than the total number of units for which he registered the previous semester; to register for 18 units, 40 more grade points.

To register for less than 12 units of academic work requires the permission of the Classification Committee.

Auditing of Courses: Regularly enrolled students who are paying full tuition may, in addition to the courses they are carrying for credit, audit other courses. They should enroll for them through the Registrar's Office. All others must pay the regular auditor's fee, see page 38.

Quality of work: A student is expected to secure each semester twice as many grade points as the total number of units of registration.

Near the end of the first five weeks and near the middle of each semester faculty are required to report all students doing unsatisfactory work for a period preceding the date of the report. In addition to these general reports instructors may make reports at any time concerning individual students who are not in good scholastic standing. Advisers and deans receive such reports and take such steps as are advisable in each individual case.

At the end of each semester a complete report is made on every student. This report becomes a part of the student's record and indicates his standing in the courses for which he has been registered.

The college may at any time require the withdrawal of a student if the quality of his work seems to warrant such action. Decision in every such case is reached by the joint action of the Student Affairs and Classification Committees in consultation with the student's adviser.

Completion of work: To be counted as work completed in the course all papers, reports, drawings, and other assigned exercises must be turned in to instructors before the final examination.

Dismissal from Courses: A student who proves unable or unwilling to carry a course satisfactorily may be dropped from it by the Classification Committee upon the recommendation of the instructor at any time later than six weeks from the beginning of the course. The student's class card, with grade of either FF or W for the course and an annotation reporting the fact of his having been dropped, shall be turned in to the Registrar's Office.

Class Attendance: Students are expected to maintain regular attendance at all class appointments in the courses for which they are registered.

While there is no general college requirement, each instructor has the right to establish such specific regulations regarding attendance as may seem best suited to his particular department.

Final Examinations: Seniors are excused from final examinations in the semester in which they take their comprehensive examinations. Final examinations are required of all other students in all subjects save as exceptions are made by action of the faculty.

The schedule of final examinations is prepared by the Courses of Study

Committee. No changes of examination dates may be made without the consent of this Committee. Examinations for individual students may be given at other than scheduled times only by consent of the Classification Committee and on the presentation to the instructor of a Business Office receipt for a fee of two dollars (\$2.00), unless this fee is remitted by the Committee.

Field Trips: Field trips are looked upon by the faculty as a legitimate part of certain courses. Permission for such trips is secured by instructors from the Courses of Study Committee at the opening of each semester. Instructors certify to the Registrar's Office the names of students participating in these trips.

Faculty Advisers: Each new student is assigned to a faculty adviser, with whom he works during his first year in college. At the end of that time, in the light of the student's interest, an adviser is assigned with whom the student will work during the remainder of his college course. If at any time a change is deemed wise it is made through the Dean of Students.

Pre-Registration and Registration: On appointed days shortly after the publication of the catalog in the spring and before Christmas vacation in December all students must pre-register by filling out schedules listing their choice of subjects for the following semester. The fee for any change in this pre-registration is three dollars.

Pre-registration and registration of new students are conducted on announced days at the opening of each semester.

Registration is completed by the payment of tuition and fees on appointed days at the beginning of each semester.

The fee for late pre-registration or late registration is \$2.00 for the first or second day following the appointed days, and \$1.00 additional for every day thereafter to a maximum of \$10.00.

Students are allowed credit for those courses only for which they are formally registered.

Students are not received later than two weeks from the beginning of class work.

Changes in Registration: Upon application to the Registrar's Office and with the approval of his adviser and the instructor concerned, a student wishing to modify his schedule of studies by addition or substitution of courses may do so within two weeks of the beginning of class work. All students except those registering for the first time are required to pay a change fee of three dollars. No change of registration is completed until the student has complied with the procedure established by the Registrar's Office. Students withdrawing from laboratory fee courses within three weeks of the beginning of classes will be refunded the full fee. One-half the full fee will be refunded to those withdrawing in the following three-week period. But after six weeks from the beginning of classes no laboratory fees will be refunded.

A student may withdraw from a course within six weeks following the

beginning of class work by following the procedure prescribed by the Registrar's Office. Thereafter, the dropping of a course by a student shall entail for him a grade of FF for the course, except as circumstances may warrant in the judgment of the instructor and the Classification Committee, warranting a grade of W.

Matriculation: Matriculation implies the proven ability to carry college work. To this end the standing of all students is provisional until after the first semester. To be matriculated for one semester. At that time those new students who are matriculated who have shown themselves in accord with the spirit of the College, have carried a minimum of 12 academic units, and who have made at least an over-all average of C on all work attempted during the term of residence. For those matriculating at the end of the first semester a public matriculation ceremony is held early in the second semester.

Students failing to matriculate at the end of their first semester of residence may be matriculated at the end of any subsequent semester provided they have met all the above requirements including an over-all average of C on all work attempted during their whole period of residence.

Students are not candidates for a degree until they have matriculated.

The Faculty Regulation on English: In the evaluation of all academic exercises the quality of English used by the student will be weighed together with the soundness and completeness of his thinking. Faculty members are expected to report to the Faculty Committee on English all students whose use of English is unsatisfactory. On the recommendation of this Committee a student whose English is persistently unacceptable may be required to withdraw from the College at the end of any semester by the joint action of the Student Affairs and Classification Committees. Habitual and flagrant misspelling is considered a deficiency in English to which this regulation applies.

REQUIREMENTS FOR DISTRIBUTION IN THE LOWER DIVISION

All students must satisfy, by the end of the Junior year, the following requirements for distribution in the Lower Division. Normally the distribution requirements shall be met only by the Pomona College courses listed below unless exception is granted by the Classification Committee. Students from other institutions who plan to transfer to advanced standing in Pomona College are advised to scrutinize their programs carefully to be sure they have taken the required work and to consult the Registrar concerning any questions as to the acceptance of credit.

1. *English 1a, 1b.* An Introductory Course. A few students who make exceptionally high scores on the College Board Examination and also on an exercise in composition set by the Department of English are exempted from *English 1a and are enrolled in English 1b in the First Semester.* If they wish, such students may take the year course, which is a study of composition and liter-

are on the college level. Remedial work in English below the college level under the supervision of a special faculty committee.

A year course in a biological science. Biology 1, Botany 12 and either for 17; Zoology 1 or 11.

A year course in a physical science: Astronomy 51; Chemistry 1; Biology 1 and 2; Physics 1; Physics 51.

Note: A student may satisfy the requirement in either Group 2 or Group 3, not in both, by offering for admission a recommended unit of high school work in one of the sciences listed in the Group from which he wishes to be excused.

and 5. *Courses in two social science departments* (each a full year course): History 1; Government 51; Sociology 51 and 52; Economics 51; Political Economy 1; Education 53. Normally History 1 will be taken as one of the two courses.

Note: Sociology 51 and 52 constitute the integrated year course in sociology for students who expect to take only one year of sociology. For students planning more extensive work in sociology, Sociology 51 and any two higher-numbered semester courses will meet the year course requirement.

A year course in literature, art or music: This requirement may be met by a course primarily concerned with the appreciation of literature rather than with the mastery of language, or by a year course in art or music. Acceptable courses are:

- a. English 50 or six units from English 50a, 56, 57, and 58.
- b. French 51 and 81, German 53, Latin 57, Spanish 71 and 91.
- c. In the classics and in modern European languages, any course, in the original or translation, numbered above 100, except courses in composition and conversation.
- d. Any year course of not less than four units in art or music.

A year course in philosophy or religion: Philosophy 55; 57; Religion 1, 5.

REQUIREMENTS FOR CONCENTRATION IN THE UPPER DIVISION

STUDENTS must make a tentative choice of a major field of concentration during the Freshman year and a definite choice by the end of the Sophomore year. During their first two years students will be expected to complete the courses required by the department or departments of their choice.

Each student's program of concentration shall culminate in a final written Comprehensive examination over the entire field in which he has concentrated. The student must pass this examination in order to qualify for graduation. In the departments research projects take the place of the written examination. The Comprehensive Examinations must be taken at the officially scheduled time. Students who have failed Comprehensive Examinations may request permission to retake them at the opening of the college year and at the end

of each semester. Such applications must be in the hands of the department concerned by September 1, December 1, or April 1. A fee of \$10 will be charged for a re-examination which is taken at other than the times set for a regular comprehensive examination. All students who intend to take a regularly scheduled comprehensive examination must file an application with the Registrar by December 1 or April 1.

A program of concentration leading to the comprehensive examination must include not less than twenty-four hours and not more than thirty-six hours of work in courses numbered over 100 in the chosen field. These limits apply to that part of the student's program on which the comprehensive examination will be set. For the entire four years of college, not more than a total of fifty-two units in any one department (in Music not more than a total of sixty units) may be counted toward graduation.

A few concentrations have been arranged so as to permit a combination of courses in various departments. In many cases concentration will be preparation for professional study or other specialized training after graduation.

For concentration in some fields a reading knowledge of at least one modern foreign language is necessary; in many fields a command of two is desirable. It is to the advantage of the student to acquire as much as possible of this reading knowledge before entering college, and whatever additional training is needed should be taken early in his college course.

The requirements for concentration in any department will be found below the list of courses offered by the department. The several programs of concentration in fields consisting of related courses in more than one department follow immediately.

Concentration In Special Fields

IN ADDITION to concentration programs in the various departments, the following programs in special fields are available:

INTERNATIONAL RELATIONS

THIS PROGRAM is designed for students having an interest in the political, economic and cultural aspects of international relations as well as for those contemplating careers in diplomatic service or foreign commerce. All those electing this area of concentration will be required to have a reading and speaking knowledge of at least one modern foreign language. Some evidence of ability to read and speak a foreign language (French, Spanish, Chinese, German, Russian) must, except in the case of Chinese, be submitted to the program adviser by the beginning of the junior year, and to

language examiner concerned must certify the competence of the student in that language not later than the close of the first semester of the senior year.

Prerequisites: History 1, 55; Government 51; Economics 51; and modern foreign language as indicated above. (American Political Economy may not be offered in fulfillment of one of the requirements for distribution.) On registering for History 55, the student should arrange with the instructor to devote the bulk of his collateral reading to American diplomatic history.

Lower-division recommendations: Sociology 51; Psychology 51; Statistics (Economics 57).

PROGRAM OF CONCENTRATION

A minimum of 30 upper-division units as follows: Modern European History (History 113a, 113b or equivalent), Comparative Government (Government 125, 126), American Foreign Policy (Government 165), International Politics and Organization (Government 167), Money and Banking (Economics 103), Interregional Trade (Economics 154), and 6 additional units to be selected in consultation with the adviser. In making these elections students are urged to consider the relevant courses available in the fields of Sociology, Latin-American Affairs and Oriental Affairs.

Junior Transfers: Students transferring to Pomona at the beginning of the junior year are eligible to concentrate in International Relations provided the prerequisites are met before entrance or can be satisfied in the junior year.

For the exceptionally promising student a program of honors study in International Relations can be arranged. The specific requirements beyond the requisite grade point average may be met by six units covering Government 165 and Government 167 and six units of advanced reading and directed research culminating in the presentation of a thesis.

Note: Students intending to do graduate work in International Relations at the University of California (in Berkeley or Los Angeles) should either major in government or at any rate include in their programs 20 appropriate upper division units in government.

FOREIGN AREA AND LANGUAGE CONCENTRATION

EAST ASIA AREA CONCENTRATION

POMONA COLLEGE has one of the best oriental libraries on the Pacific Coast, affording excellent resources for students concentrating in East Asia.

Requirements: A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year of work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Philosophy 126.

Recommendations: It is advisable for a student concentrating in this field to have at least the following introductory courses in certain related fields: Political Economy 1; Government 51; History 1; Economics 51; Sociology 51. These should normally be taken in the freshman and sophomore years. Some students wish to add, in their junior and senior years, Economics 154; Government 167; History 114; Sociology 110.

It is also highly desirable for students studying China intensively to have some work in the Chinese language, three years of which (Oriental Affairs 52, 151, 181) are offered.

Because several of the above required courses are offered only in alternate years, students concentrating in this area should plan their course programs well ahead.

LATIN AMERICAN AFFAIRS

CONCENTRATION in Latin American Affairs is possible in connection with the concentration in International Relations, see page 77. Concentration on Latin America is designed for students looking toward teaching Latin American history, economics, etc.; toward government service in Latin America; toward a business career in Latin America. Students interested in this field should consult with Mr. Herring or Mr. Crowell.

MODERN SOCIAL INSTITUTIONS

For those students whose needs and interests would be better satisfied by a course of study somewhat broader than that in a normal major, Pomona offers a program of concentration in Modern Social Institutions drawing on the offerings of several departments. Administered under the chairmanship of Mr. Luther J. Lee, Jr., of the Department of Government, it enables

ident to pursue a course of instruction having for its focus the institutional and social problems of the American people. Programs in this field include (1) certain specified courses in the social sciences; (2) in the senior year directed reading culminating in a paper which is counted as a part of a comprehensive examination; and (3) also in the senior year a common seminar experience intended to give unity to the concentration (Government; American Political Ideas).

Students electing this concentration must offer 36 units of upper division work, not less than six nor more than 15 of which may be earned in one department. In each case, however, the program must include the specified core courses as indicated below. (No provision is made for combinations embracing work in but two fields for the reason that nearly every program of normal concentration permits a student desiring to do so to arrange such a combination as, for example, sociology and psychology.) The core courses, prerequisites being presumed, include History 55a, 55b, History of the United States (taken, if possible, in the sophomore year); Government 165, American Foreign Policy; Economics 111, Labor Economics; Sociology 112, The American Community; and, in the senior year, Government 101, American Political Ideas; and either Government 157, Parties and Pressure Groups; or Government 160, Public Opinion and Propaganda.

In satisfying the college requirements for distribution in the lower division and in supplementing them it is recommended that students registered for this concentration endeavor to include the introductory courses in each of the social sciences and in psychology and that they give serious consideration to meeting requirement 6 (art, music, or literature) either by a second year course in some foreign language or by English 50a, 50b, Great English Authors. English 105a, 105b, American Literature, is strongly recommended in the senior year.

In arranging his program of concentration the student, in consultation with his adviser, may select the appropriate number of units from offerings in Economics, Education, English, Government, History, Philosophy, Psychology, Religion, and Sociology.

Pre-Professional Programs

THE academic program of Pomona College furnishes preparation for many of the professions. Indicated below are suggested programs which might be combined with concentrations in certain fields.

PRE-MEDICAL COURSE

CERTAIN SUBJECTS have been designated by the Council on Medical Education of the American Medical Association as minimum requirements for entrance to medical colleges. Many of the leading medical colleges, however, have requirements well beyond this

minimum, and are selecting only those who are best prepared have demonstrated the highest scholastic ability and laudable personal traits. Pre-medical students are advised not to attempt to crowd the minimum requirements into three years of college work but to build, in more leisurely fashion, a broad educational foundation. Breadth of view, culture, and a thorough grounding in biological and physico-chemical sciences are the objectives of the pre-medical course. It is important to note that these objectives are stressed by all medical colleges.

Below is outlined a curriculum which meets the requirements for graduation from Pomona College and the entrance requirements of most of the medical colleges in the United States. It can readily be modified, as regards both science and non-science courses, to meet the specific requirements of any medical college and the special needs of individuals.

REQUIREMENTS FOR CONCENTRATION

Lower Division Courses: Zoology 1, 60; Chemistry 1, 59; Physics 51; Foreign Language, German preferred.

Upper Division Courses: Zoology 115, 120; Chemistry 106, 111, and additional units selected from upper division physical and biological science courses for which prerequisites have been met to make a minimum of 24 units.

SUGGESTED COURSES

FRESHMAN YEAR: English 1; Chemistry 1; Zoology 1; History 1.

SOPHOMORE YEAR: Chemistry 110, 111; German 1; Zoology 60, 61; Electives from literature, art or music; philosophy or religion.

JUNIOR YEAR: Chemistry 59, 106; Physics 51; German 53. Electives from social sciences.

SENIOR YEAR: Zoology 120.

Most medical colleges require a reading knowledge of either French, German or Spanish, with a preference for German. Students planning to study medicine should anticipate these requirements by taking some language in high school with a view toward completing at least one year in college. Also, students will find it advantageous to take trigonometry in high school. In addition students should consult with their adviser to determine

proper time to take the Medical College Admission Test, of which is an entrance requirement of most medical colleges.

Students interested in pre-nursing should consult the Zoology Department.

PRE-ENGINEERING PROGRAM

THE ENGINEERING profession has assumed a more important role in modern society, there has been a growing demand for professional engineers who have, in addition to technical ability and training, a broad understanding of the economic, social, and political forces which are molding modern civilization. Recognition of these requirements for the modern engineer may be found in liberalized curricula of leading engineering schools.

Students at Pomona College who plan to enter a professional engineering school have an opportunity to obtain an excellent foundation in mathematics and physical science in addition to a well-balanced liberal training. While no professional engineering courses are offered at Pomona, and no engineering degree is granted at Pomona, it is possible in some cases for students to enter a graduate school of engineering after being graduated from Pomona with a concentration program in physical science. Those who plan to continue with engineering training after leaving Pomona should consult with members of the staff in physical science who are acquainted with engineering school requirements.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from M.I.T. in a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona. For those electing the plan the following program is suggested.

FRESHMAN YEAR

English 1a, 1b	6 units
Mathematics 1a, 1b	6 units
Physics 51a, 51b	8 units
Electives	12 units

The 12 elective units are for distribution. If Art or Music included, the remaining 2 units should be in Engineering Drawing.

SOPHOMORE YEAR

Mathematics 65a, 65b	6 units
Chemistry 1a, 1b	8 units
Engineering Drawing	2 units
Electives	16 units

12 elective units are for distribution, 4 are optional.

JUNIOR YEAR

Mathematics 151a, 151b (or Mathematics 125)	6 units
Physics 113a, 113b	6 units
Physics 141a-141b, 142a-142b	8 units
Physics 110	3 units
Mathematics 185a	3 units
Electives	6 units

The six elective units are for distribution.

Optional Courses: Engineering Drawing 40a, 40b, 102; Physics 153, 154, 155; Geology 1a-1b; English 63; Speech 52a, 52b; Surveying (offered in Summer session).

Those electing the above program should consult with the head of the Mathematics Department or the Physics Department concerning concentration requirements.

PRE-LEGAL PROGRAM

ADEQUATE PREPARATION for the study and practice of law requires the completion of an undergraduate program in the liberal arts leading to the baccalaureate degree. Concentration in government, economics, or history is recommended though not to the exclusion of appropriate courses in other fields.

Students intending to study law following graduation should avail themselves of opportunities to widen their intellectual horizons and to develop their capacity for intensive inquiry and for effective and precise expression, both written and oral. While in the lower division they should include in their program courses in logic, psychology and public address. During their years of concentration, whether the field be government, economics, history or otherwise, they should study, among other subjects: introduction to law, constitutional and administrative law, American political ideas, parties and pressure groups, political theory, American history, English history, accounting, public finance, labor economics, industrial organization and public policy, money and banking, corporation finance and ethical theory. It is also advisable to secure a thorough training in expository writing.

PRE-THEOLOGICAL TRAINING

STUDENTS PLANNING to prepare themselves for Seminary or Divinity School training, with a view to entering the parish ministry or college teaching in religion, are advised to secure a well-rounded college education.

Concentration in religion in their undergraduate program is normally deemed inadvisable. Such students could most profitably fulfill their requirements for concentration in one of the following departments: English, History, Philosophy, Psychology, or Sociology; or in the trans-departmental program in Modern Social Institutions. In any event, the total program for such students should include all of the following as a minimum breadth of preparation: four semester courses in English (composition and literature); four semester courses in foreign language; two semester courses in philosophy; two semester courses in natural science, including at least one course in biology; six semester courses in social science, including at least two courses in history, one in economics, one in sociology, and one in social psychology; and six semester courses in religion, including Religion 1, 2, and 65.

Students planning to prepare themselves for Seminary or Divinity School training, with a view to entering the field of religious education, are urged to concentrate in religion in their undergraduate studies.

PRE-JOURNALISM TRAINING

ON THE RECOMMENDATION of graduate schools of journalism and distinguished journalists, students planning a career in journalism are advised to concentrate in any principal field of study, to seek a broad and liberal education, and to improve their mastery of the art of writing. Courses in the social sciences, literature, the arts, foreign languages are strongly recommended. Study in the natural sciences is often desirable, and for some kinds of journalistic work concentration in one of the sciences is advisable. General training in accurate observation and reporting is an important part of writing courses: English I, 63, 64, III, 151.

TEACHING AND EDUCATIONAL ADMINISTRATION

In California every public school teacher must have a certification. This is issued by the county in which the teacher is employed upon presentation of a credential granted by the State Board of Education.

California requires students who wish a secondary credential to complete a bachelor's degree and one year of graduate work. While California permits the fulfillment of elementary credential requirements in the usual four-year undergraduate program, several California colleges and universities consider a graduate program desirable for elementary as well as secondary teachers. Pomona College is one of these institutions and its elementary credential program is, therefore, organized on a five year plan. The fifth year may be taken at the Claremont Graduate School (one of the Associated Colleges at Claremont) which is authorized to recommend candidates for most of the general and a few of the special teaching credentials, or at any other college accredited by the State for teacher education. (Appropriate program planning well in advance will permit the completion of the elementary credential requirements with one summer and one semester of graduate work.)

For the *secondary* credential, California requires collegiate preparation in two fields commonly taught in the secondary school: a "teaching major" representing 36 units and a "teaching minor" representing 20 units. These two fields must be selected from the following: social studies, life sciences, physical sciences, English, speech, language arts, foreign language, mathematics, and health education; or from the special fields of agriculture, art, business,

education, homemaking, industrial arts, librarianship, music, and physical education. Students majoring in areas not offered in secondary school curricula must present two "teaching minors." Thus, prospective secondary school teachers will concentrate at Sonoma College in the area or areas they expect to teach.

Students preparing for the *kindergarten-primary* or *elementary* credential are not required to present a specific teaching major. The concentration in education is especially designed to serve prospective elementary teachers, but several other concentrations are acceptable such as, psychology, art, music, physical education. The program for concentration in education is described on page 111.

As much as requirements vary considerably for different credentials, and for the various graduate schools of education, students who expect to enter the profession of teaching either in California or elsewhere should consult the Education Department before registration concerning these requirements.

PRE-LIBRARY TRAINING

BROAD GENERAL TRAINING and specialized knowledge in a subject are essentials for students planning to become librarians. The ability to use the typewriter with accuracy and speed, and a reading knowledge of at least two modern foreign languages are usually prerequisites to admission to a library school. All librarians will need a knowledge of statistical methods useful. Those who intend to go into public library work ought to have an understanding of reorganization and problems of government, municipal government particularly, while those aiming at the college and university level must have a good background in the history and theories of higher education. Students expecting to take up public school library work in California are required to complete nine hours in education. Although it is not a prerequisite, actual experience in a library is a distinct advantage.

While concentration in pre-library training is not offered, students looking forward to work in this field are strongly recommended to take the following courses: English 101 or 103, 105; History 113 or 103 or 107; six hours of advanced work in Philosophy, Psychology, or Foreign Languages. Other recommended courses include Education 104, Psychology 107, Art 51, Economics 57, Philosophy 55, Comparative Literature 181.

SOCIOLOGY

SOCIAL WORK. Students who plan to follow social work as a profession should attend a graduate school of social work. The expansion of social services in recent years has created such a heavy demand for social workers that in a few limited fields college graduates are accepted without graduate training, but they can expect to be advanced to the higher administrative positions.

The best undergraduate training for students expecting to enter graduate schools of social work is a broad liberal arts education with special emphasis upon the social sciences such as the sociology concentration provides. Introductory statistics and psychology should be included, also Economics III and Government 103 should be found useful. Those planning to work in the Pacific South should learn to speak Spanish.

SOCIAL RESEARCH. There is considerable demand for research workers in government agencies—federal, state, and local—as well as in private foundations. Usually at least a master's degree is required, including a knowledge of statistical method. The regular undergraduate concentration in sociology will prepare one adequately for entrance into graduate school, for which there are quite a number of scholarships and fellowships available for outstanding students.

TEACHING. Students preparing to teach sociology should follow the regular sociology concentration. A master's degree is usually essential for teaching in high schools and junior colleges, and a doctor's degree for teaching in colleges and universities. Graduate scholarships, fellowships, and teaching assistantships are available in a good many universities for outstanding students.

Honors Study

Honors study is aimed at a deeper and more scholarly grasp of the student's chosen field than is customary; it is also aimed at broadening his intellectual life by the discovery and exploration of topics relevant to the special subject of inquiry. Students who show the capacity and the inclination for more than average intellectual achievement may be permitted during their Junior and Senior years to enroll for honors study.

An honors program frees the student's energies by allowing him, through a flexible use of instruction and courses of study, to spend a considerable portion of his time in independent study. Released from as much academic routine as his instructors may approve, an honors candidate thus assumes responsibility for a more profound and wider knowledge than is expected of the ordinary student. He will be admitted to honors status only upon the basis of a record which shows promise of competency to carry on work of high quality; he will be continued only if he exercises initiative and self-direction, places scholarship consistently first among his interests, and maintains a high standard of scholarship in his honors program as well as in his other work.

CONDUCT OF PROGRAMS

General administration of honors work is vested in the Courses of Study Committee, which reviews the programs of honors study planned by departments, divisions, or inter-divisional committees and administers the faculty regulations pertaining to them.

Eligibility: A minimum academic grade-point average of 3.0 is ordinarily a requirement for enrollment in honors study. Aside from this requirement, the eligibility of a student for honors status is determined by the department or division in which he will work.

Hours: The number of hours allotted to honors study must be no less than twelve and not more than eighteen. Within the limits of these hours a student may be excused from formal classes. The method of honors study varies in the divisions: it may be carried on in seminar or laboratory projects, or it may consist of independent study or creative work.

The general requirement limiting to a total of fifty-two units the work which may be taken in one department applies also to honors

programs. The comprehensive examination in an honors program, however, may cover a greater area than does the Senior comprehensive examination required of all students.

Application: Application for enrollment should normally be made at the end of the Sophomore year. The application form obtainable at the Registrar's office, must include a statement of the program which the applicant intends to follow and must be approved by the faculty member in charge of the program. For detailed information concerning divisional and departmental programs the student should consult members of the departmental division in which he would like to undertake honors study.

Withdrawal: A student may withdraw from honors status on his own request with the approval of the division concerned. In the case where the performance of a student falls below a standard of high quality either in his honors work or in his courses, he may be withdrawn from honors status either by the division or by the Courses of Study Committee.

Examinations: Evidence of the success of the student in his honors work is measured by written and oral examinations administered toward the close of the Senior year. Normally all or part of the Senior comprehensive examination in a field of study will form a part of the honors examination in that field. With regard to ordinary courses the student is subject to the requirements normally pertaining to them. He may be exempted at the discretion of the instructors concerned from taking course examinations within the field of his honors program.

A student's performance in his honors examination and in all other work required for the completion of his honors program is judged by the department or division in accordance with procedures approved by the division, or, in some instances, by an inter-divisional committee with the approval of the Courses of Study Committee. A student who has maintained in all his work a grade point average of 3.0 and who has met successfully all the requirements of his program of honors study will be graduated with notation of that accomplishment. He will be eligible also for general commencement honors described below. A student who fails to meet the standards of his honors program but who in his hon

Students who complete work worthy of credit will be recommended by the Courses of Study Committee for graduation in course (*rite*).

COMMENCEMENT HONORS

Pomona College awards the distinctions *cum laude*, *magna cum laude*, and *summa cum laude* to graduating seniors who have distinguished themselves in the over-all average of their work and in the senior comprehensive examination.

GRADUATE WORK IN THE CLAREMONT GRADUATE SCHOOL

Graduate work in history, oriental affairs, Latin America, political economy, psychology, literature, philosophy, the biological and physical sciences, and the fine arts and music, along with professional work in public school education and psychology, is conducted by the Claremont Graduate School, whose faculty includes members of the staffs of Pomona College, Scripps College, and Claremont Men's College, as well as its own appointees. A catalog will be furnished upon request to the Dean of the Claremont Graduate School, Harper Hall, Claremont, California.

GRADUATE RECORD EXAMINATION

MANY OUTSTANDING graduate or professional schools require or request that applicants for admission, as well as for fellowships and scholarships, take the Graduate Record Examination administered by Educational Testing Services, the national academic testing organization. The Graduate Record Examination tests general knowledge in the fields of study covered by the Pomona College curriculum and does not require special preparation. Students who intend to enter graduate or professional schools are advised to write early in their senior year directly to the Educational Testing Service, Box 9896, Los Feliz Station, Los Angeles 27, California.

Courses of Instruction

ELEMENTARY courses numbered below 50 are designed primarily for the freshman year. Courses numbered 50 to 99 are either those which follow the lower course or are the more advanced beginning courses. Courses numbered over 100 are for juniors and seniors and may not be entered by students with previous work in the same field, except by written permission of instructors. Courses numbered NC carry no academic credit. In some departments a definite sequence of courses must be followed. The hyphen in a course number designates that credit will not be allowed for only one semester of the year course. When course numbers are connected by a comma, independent credit is given for the work of the first semester. Entrance to the second semester is by permission of the instructor.

Any course may be withdrawn if the enrollment is less than five.

Except by special permission, credit for only one unit of work in a department is not allowed.

COURSES IN THE ASSOCIATED COLLEGES

Following the departmental offerings of Pomona College are listed certain courses in Scripps College and Claremont Men's College open to Pomona sophomores, juniors and seniors under appropriate conditions. Normally only those courses so listed are open to Pomona College students. It should be noted that most of the Scripps College courses are year courses and consequently credit cannot be allowed for only one semester. To enroll in courses other than those listed, students must first obtain a permission slip from the chairman of the corresponding department at Pomona. Each regular student in residence in Pomona College shall, however, select not less than half of his registration each academic year from courses in Pomona College. Normally freshmen will take the entire programs of study in the college of their residence. In a few departments involving the use of physical equipment and laboratory space, such as art and the sciences, it is necessary to impose limitations on the exchange privileges.

Certain graduate courses in the Claremont Graduate School are also open to Pomona seniors who are concentrating in the field.

which the courses are offered. Permission must be secured from the chairman of the department in which the senior is concentrating and from the instructor giving the course.

Where a course in Scripps, Claremont Men's College, or the Graduate School duplicates the material of a Pomona course, credit will not be given for both.

DIVISIONS

The courses in the Pomona College curriculum are arranged in three divisions as follows:

DIVISION I [*Humanities*] Art, Chinese, Comparative Literature, English, French, German, Greek, Italian, Latin, Music, Philosophy, Russian, Speech and Dramatics, Spanish

DIVISION II [*Natural Sciences*] Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Military Science, Physics, Psychology, Zoology

DIVISION III [*Social Sciences*] Economics, Education, Geography, Government, History, Oriental Affairs, Physical Education, Religion, Sociology

Art

Three types of concentration are open to students of art within the department: Painting (including Drawing and Design), Sculpture, and Art History. Specialization may be determined in the second year, but correlation between the practice of the two and three dimensional arts and historical and aesthetic study is maintained.

A sense of design and an appreciation of and ability to render form must be exhibited in the basic courses as the foundation for further specialization. Each student will be expected to present his work in the Department Exhibition at the end of each year. A comprehensive examination is required of all candidates for the Bachelor of Arts degree.

In each unit of credit in Applied Art, there is required a minimum of one hour of assigned reading and two hours of studio work per week. Students are urged to prolong these periods when other work permits.

The total number of hours of Applied Art accepted toward graduation is distributed as not to exceed 8 hours in courses numbered under 100. In courses where lecture and laboratory work are combined, the work is divided half theory and half applied.

CONCENTRATION REQUIREMENTS

In addition to the required courses listed in the concentrations described above, sufficient courses to complete a total of 24 units of upper division work

are to be chosen from Upper Division Electives with the consent of chairman of the department.

PAINTING

Lower Division Requirements: Art 3, 9, 51, 61.

Upper Division Requirements: Art 116, 120, 185.

Upper Division Electives: Art 105, 115, 178, 185, or Scripps II-121, II-123, II-130, II-141.

SCULPTURE

Lower Division Requirements: Art 3, 9, 51, 65.

Upper Division Requirements: Art 116, 162.

Upper Division Electives: Art 105, 115, 120, 178, 185, or Scripps II-122, II-123, II-130, II-141.

ART HISTORY

Lower Division Requirements: History 1, Art 3, 9, 51.

Upper Division Requirements: Art 115, 116, 178.

Upper Division Electives: Art 105, 120, or Scripps II-121, II-122, II-130, II-141.

SPECIAL PROGRAM

WITH APPLIED ART TAKEN AT SCRIPPS COLLEGE

Lower Division Requirements: History 1, Art 51, Art II-2, and one of following: Art II-21, II-22, II-23 or II-30.

Upper Division Requirements: 6 units of upper division European or Oriental History, 9 units of Art History at Pomona College, 18 units of Applied Art at Scripps College.

3a-3b. DESIGN AND DRAWING. *Mr. Grant.* A basic course investigating fundamentals of design as applied to painting and drawing. Tempera Casein will be the primary mediums for class work. Two units. Two sections. *MW, 10-12; MW, 1:15-3:15.*

9a-9b. SCULPTURE. *Mr. Lawler.* A basic course in sculpture, comprising study of the nature of form. Forms, both abstract and realistic, will be constructed in a variety of media. 2 units. Two sections. *TTh, 1:15-3:15; TTh, 3:15-5:05.*

51a-51b. HISTORY OF ART. *Staff.* Study of the historical development of art with especial attention to national genius and stylistic expression. Ancient, Classic, Early Christian and Byzantine Periods will be studied in first semester, and Medieval, Renaissance, Baroque, Neo-Classic, Roman Realistic and Contemporary Art in the second semester. This course or equivalent is normally a prerequisite for advanced courses in the History of Art. 3 units. *MWF, 9.*

55a, 55b. ANCIENT ART AND ARCHAEOLOGY. *Mr. Karo.* A survey of the art of Greece and Rome, in reference to the life of both countries and neighboring civilizations (Egyptian, Near Eastern, Italic, Etruscan, etc.). The first semester will cover Greece, from the prehistoric Minoan-Mycer-

culture to Alexander the Great. Hellenistic Greece, Rome and the Roman World are reserved for the second semester. 3 units. *MWF, 10.*

15a, 61b. FIGURE DRAWING AND GRAPHIC DESIGN. *Mr. Grant.* The rendering of form with emphasis on the development of the student's drawing ability. 2 units. *TTh, 9-11.*

15a-65b. ADVANCED SCULPTURE. *Mr. Lawler.* Continuing study of the nature of form. Work from the model, modeling in relief. Consideration of sculptural techniques and materials. 2 units. Two sections. *TTh, 1:15-3:05; Th, 3:15-5:05.*

15a, 105b. ADVANCED FIGURE DRAWING AND GRAPHIC DESIGN. *Mr. Grant.* 2 units. *TTh, 9-11.*

15. FOUNDATIONS OF MODERN ART. *Staff.* A survey of the significant stylistic trends of the eighteenth and nineteenth century art as background to the detailed study of the development of Impressionism, Expressionism, Cubism and various contemporary schools of art. 3 units. First semester. *TThS, 10.*

15. FUNDAMENTALS OF ART THEORY. *Staff.* Studies in the relation of literary discussion of art to the development and appreciation of the fine arts. Discussion of critical principles of leading art historians; aesthetic systems as principles of art history; practical exercises to test the validity of the various theories. 3 units. Second semester. *TThS, 10.*

15a, 120b. PAINTING. *Mr. Grant.* Practice in still life, landscape and figure painting investigating various techniques and mediums. 2 units. *T or Th, 1:5-4:05 and arranged.*

15a-162b. CREATIVE SCULPTURE. *Mr. Lawler.* A course open only to advanced students of ability for the development of original problems in various media. (May be repeated.) 2 units. Two sections. *TTh, 1:15-3:05; Th, 3:15-5:05.*

17a, 176b. PROBLEMS IN ANCIENT ART AND ARCHAEOLOGY. *Mr. Karo.* A seminar permitting advanced research in this field. Prerequisite: Classics 55 or Art 51, 116 and permission of the instructor. With departmental permission concentrators in Art History may substitute Art 176 for 178. *Arranged.*

17a, 178b. READINGS IN HISTORY OF ART. *Staff.* The study of a particular period, school, or movement in art. Offered primarily for majors in history or theory of the subject. The course is designed to enable the student to become intimately familiar with the visual manifestations in painting, sculpture, architecture, or one of the minor arts of an era in which he may be pursuing a study in philosophy, literature, or other field. Prerequisite: Art 51, and Art 116. (May be repeated.) 3 units. *Arranged.*

185a, 185b. PROBLEMS IN APPLIED ART. *Mr. Grant*. Opportunity is given for the pursuit of individual projects in the graphic arts to suit the interest and ability of the student. (May be repeated.) 1 to 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

II-2. FUNDAMENTALS OF DRAWING AND DESIGN. *Staff*. Year course. Open only by special permission. *MWF, 1:15-4:05*.

II-21. BEGINNING PAINTING. Year course. Prerequisite II-2 or its equivalent. *TTh, 1:15-4:05*.

II-22. BEGINNING WEAVING. *Mrs. Stewart*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-23. BEGINNING CERAMICS. *Mr. Petterson*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-30. BEGINNING SCULPTURE. *Mr. Stewart*. Year course. Prerequisite II-2 or its equivalent and permission of instructor. *MWF, 1:15-4:05*.

II-121. ADVANCED PAINTING. *Mr. McFee*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-122. WEAVING. *Mrs. Stewart*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-123. CERAMICS. *Mr. Petterson*. Year course. May be repeated for credit. Prerequisite II-2 or equivalent. *TTh, 1:15-4:05*.

II-130. SCULPTURE. *Mr. Stewart*. Year course. May be repeated for credit. Prerequisite II-2 or equivalent and permission of instructor. *MWF, 1:15-4:05*.

II-141. ARCHITECTURAL DESIGN AND PLANNING. *Mr. Whitney Smith*. Year course. Prerequisite II-2 or equivalent. By permission of instructor. *TTh, 1:15-4:05* and arranged hour.

I-70. PRINTING. *Mr. Foster*. One or two year course. *TTh, 1:15-4:05*. Registration by permission of the instructor.

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Graduate work in the history of art and architecture and in applied art is available under the auspices of the Claremont Graduate School.

Astronomy

The general prerequisites for upper division courses or for concentration in the department are Astronomy 51, its equivalent, or a satisfactory background in science. Students transferring from Junior College or elsewhere may qualify for upper division registration or departmental concentration by establishing the same prerequisites.

A basic program for concentration in Astronomy, with minor in Mathematics and Physics, should include Astronomy 155, 156, and at least two units of 180, together with not less than six units of mathematics selected from Mathematics 52, 151, 152, and four to seven units from Physics 153, 154, and 155. In special cases related upper division courses in chemistry or geology

may be substituted in the minor fields. A reading knowledge of French and German is also recommended.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 52; Geology 59, 110 and 112, plus additional upper-division units totaling a minimum of 24, selected from Astronomy 103, 151 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 161. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

51a-51b. *DESCRIPTIVE ASTRONOMY. Mr. Whitney.* A study of historical and modern astronomy presented in non-technical form. Develops acquaintance with the planets and constellations and an appreciation of man's relation to the surrounding universe. Regular evenings with the telescopes at the Brackett Observatory are supplemented by project assignments and field excursions to the astronomical centers of the region. Classroom two hours per week; observatory, one period per week. Laboratory fee \$2.00 per semester. 3 units. *MWF, 11.* (See 151a, 151b below.)

102a, 102b. *PRACTICAL ASTRONOMY AND METEOROLOGY. Mr. Whitney.* Consists of sun observations with telescope and spectroheliometer; studies of cloud formations and air mass movements related to current weather and readings of the Weather Bureau instruments at the Brackett Observatory. Photographic recording of observations introduce studies of the basic principles of the photographic process, and characteristics of various films and plates. Facilities are also offered for those wishing to make their own telescope mirrors. Two class periods and one laboratory period. Laboratory fee \$2.00 per semester. 3 units. Arranged.

13. *NAVIGATION. Mr. Whitney.* A basic course in the principles and practice of marine and air navigation. Observations of sun, moon and stars with sextants and transits of different types, and use of the latest almanacs and navigation tables provide practical experience in solving navigation problems. 3 units. Second semester. Laboratory fee \$2.00. Class *TTh, 1:15*. Laboratory arranged.

151a, 151b. *PROBLEMS IN DESCRIPTIVE ASTRONOMY. Mr. Whitney.* Offered concurrently with and related to 51a-51b. May be elected by students having a satisfactory background in the physical sciences. Preliminary conference with the instructor required. 1 unit. Arranged.

14. *CELESTIAL MECHANICS. Mr. Whitney.* A short course in the application of the laws of mechanics and gravitation to the motions of the heavenly bodies with problems on the prediction of eclipses and occultations and on the computation of the orbits of comets. 3 units. First semester. Arranged.

16. *ASTROPHYSICS. Mr. Whitney.* Considers the applications of the principles of modern physical science and analyses to the study of stellar and cosmic problems and the reciprocal contributions of astronomical research.

Laboratory observations are both visual and photographic. Class one hour, observatory two periods. Laboratory fee \$2.00. Second semester. 3 units. Class *W*, 2:15. Laboratory arranged.

180. INVESTIGATIONS IN ASTRONOMY. *Mr. Whitney.* A unified program investigation is followed in some special field such as variable stars, lunar studies, solar phenomena, etc. Each semester, 1 to 4 units. May be repeated for credit. Laboratory fee \$2.00 per unit per semester. May also be elected advanced study in navigation. Arranged.

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Graduate work in Applied Astronomy is available under the auspices of Claremont Graduate School.

Biology

Requirements for concentration: *Lower Division Courses*, Botany 12, 15, 75 for those emphasizing botany; Zoology 1 and 60. *Upper Division Courses*, Biology 112 and three courses in Group I and three courses in Group II. Biology 105 may be substituted for one course in either group): Group I, Botany 103, 105a, 107, 123a or 158; Group II, Zoology 120, 121, 123, 128, 152. Additional upper division courses in Biology, Botany, or Zoology make 24 units. *Related Fields*: high school or college chemistry; either high school physics with a grade of A or B or 6 units of college physics. *Geology I*. *Foreign Language*: to be arranged according to the needs of the student.

1a, 1b. GENERAL BIOLOGY. *Mr. Amrein, Mr. Phillips.* A general course designed primarily for those who do not intend to take further work in biology. It may be taken for credit by those who have high school biology, botany, or zoology. It will consider material, methods, and fundamental principles in the selected fields of biology considered most significant to every human being. Class, demonstration, and laboratory. Laboratory fee \$6.00 each semester. 3 units. First semester class *MW, 10* or *11*; laboratory (select one from following): *M, T, W, 1:15*. Second semester, *MWF, 10* or *11* must be kept open for class; either *T* or *W, 1:15-4:00* must be kept open for laboratory.

105. BACTERIOLOGY. *Mr. Ryerson.* General study of important bacterial methods of culture and study, and their importance in disease and agriculture. Prerequisite: one year of biological work. Laboratory fee, \$8.00. Second semester. 4 units. Class, *MW, 10*; laboratory, *MW, 2:15-4:10*, and conference, *F, 10*.

112. GENETICS. *Mr. Amrein.* This course considers modern developments in the study of heredity and evolution and their general application to plant and animal breeding and to eugenics and race questions. Prerequisite: one year of biological work. 3 units. Second semester. *MWF, 8* or *9*.

Botany

Although botany is a pure science, and the curriculum at Pomona is planned with this in mind, the subject offers excellent basic training for applied fields. Study of botany may serve as preparation for graduate study and eventually for teaching, research, or service with such federal, state, or county governmental agencies as the United States Bureau of Plant Industry, Forest Service including the Forest and Range Experiment Stations, National Park Service, U. S. Conservation Service, Fish and Wild Life Service, state fish and game commissions, or agricultural inspection agencies.

Botany Concentration: LOWER DIVISION COURSES, Botany 12, 15, 17, 75; Zoology 1 (or Biology 1a and a summer session at the Marine Laboratory). UPPER DIVISION COURSES, Biology 112; Botany 103, 105, 107, 123a, and additional courses in botany (other than 181), selected to make a total of 24 to 26 units of upper division work. RELATED FIELDS, Chemistry 1 (students emphasizing plant physiology should have Chemistry 1, 59, and 106, and Physics 1 is recommended); high school or college physics (Physics 1 or 51) or Zoology 1. Prospective candidates for graduate work should consult the department concerning foreign language requirements.

Seniors with concentration programs in botany or in biology emphasizing botany are required to register for Botany NC 198, the Senior Seminar, and Senior (1) to present a satisfactory paper in this course and to pass an oral examination on the field of the paper, or (2) to pass the senior comprehensive examination.

All students concentrating in botany should consult Mr. Benson concerning their plant collection built up in various courses. This is a graduation requirement, and the collection must be submitted for inspection at the time of the senior comprehensive examination. Credit for individual work on the collection may be had by registration in Botany 81.

Botany-Zoology Concentration: See Biology.

Botany-Chemistry Concentration: Botany 12, 15 (4 units), 17, 75; Chemistry 1, 59; Physics 51. UPPER DIVISION COURSES, Botany 103, 123, 158, and 160 or 107; Chemistry 106, 110, 111. Recommended electives from the following list: Biology 112; Botany 105 or 107, whichever was omitted above; Chemistry 158, 184, 187; Zoology 1, 60, 121, 123. Botany 12 and 15 or 17 and Chemistry 1 should be taken in the freshman year, and the full program should be planned as early as possible.

2 GENERAL BOTANY. Mr. Benson and Mr. Phillips. An elementary course for those wishing general information concerning plants or foundation work in botany. Special attention is given to the plant as a living organism, and emphasis is upon structure and function in flowering plants. Studies of evolution and of heredity are included. Laboratory fee \$6.50. 3 units. First semester *MWF, 11* must be kept free for class; laboratory Section A, (if sufficient demand), *T, 1:15-3:05*; Section B, *Th, 1:15-3:05*.

15. CLASSIFICATION AND FIELD BOTANY. *Mr. Benson.* An elementary course in classification of primarily the flowering plants; with much field work. No prerequisite, but permission of the instructor required. Laboratory fee \$8.75. 3 units. Students concentrating in botany or in biology with emphasis on botany must, others may, register for at least 1 unit of Botany 75 concurrently. Second semester. Class, *MW, 11*; laboratory section A, (if sufficient demand), *T, 1:15-4:00*, Section B, *Th, 1:15-4:00*.

17. SURVEY OF THE PLANT KINGDOM. *Mr. Phillips.* Relationships, histories, and development of algae, fungi, liverworts, mosses, ferns, cone-bearing trees, and flowering plants. No prerequisite, but permission of instructor required. Laboratory fee \$6.50. 3 units. First semester. Given in alternate years. Class, *TTh, 8*; laboratory *W, 1:15-4:00*.

75. PLANT CLASSIFICATION. *Mr. Benson.* Individual work in classification of vascular plants (ferns, cone-bearing trees, and flowering plants). The student begins or continues a collection of specimens used for developing a comparative method of plant identification. Required concurrently with Botany 15 for those concentrating in botany or in biology with emphasis on botany; elective for others. May be repeated for credit. Permission of instructor required. Laboratory fee \$2.00 per unit. 1 or 2 units. Second semester. Arranged.

81. ELEMENTARY BOTANICAL PROBLEMS. *Staff.* This course offers to qualified students opportunities for additional supervised laboratory work in such fields as (a) structure and classification of algae, (b) culture and special physiology of plants of any group favorable for study, (c) structure and development of plants, or (d) ecology. Each semester, 1 or 2 units, but not more than 1 unit may be taken in the first enrollment for a problems course. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

103. PLANT ECOLOGY (AUTECOLOGY). *Mr. Phillips.* A study of the effect of environment upon plants of forests, deserts, chaparral, grassland, and wetland, including the use of ecological and weather instruments in the field; the effect of plants on the environment; and ecological adaptation in relation to plant evolution. Prerequisite: Botany 12 or permission of the instructor. Laboratory fee \$8.00 and breakage deposit \$5.00. Class, *MW, 8*; laboratory and field trips, *F, 1:15-4:00* with occasional longer trips. (Omitted in 1951-52.)

105a, 105b. CLASSIFICATION OF FLOWERING PLANTS. *Mr. Benson.* Study of local native flowering plants and also of ferns and cone-bearing trees. Principles and methods of classifications; evolutionary series; history of botanical classifications; geographical distribution of plants correlated with geological history. Field trips for study of plants in their native habitats. Prerequisite: Botany 15. Laboratory and field trip fee \$8.75 each semester. 3 units. Given in alternate years. Class *MW, 9*; laboratory and field *M, 2:15-5:05*. (Omitted in 1951-52.)

5. STRUCTURE, DEVELOPMENT, AND RELATIONSHIPS OF GREEN PLANTS. *Mr. Benson*. A review of the structure, evolutionary series, and relationships of groups of green plants. Prerequisite, Botany 12 and 17 or equivalent. Laboratory fee \$8.00. 4 units. Second semester. Given in alternate years. Class, *MWF*, 9; laboratory *M*, 2:15-5:05.

6a, 123b. PLANT PHYSIOLOGY. *Mr. Phillips*. A study of physiological processes and principles, including photosynthesis, germination, dormancy, water relations, mineral nutrition, respiration, growth and growth hormones, and factors affecting flowering and fruiting. Experiments include growing plants in the greenhouse and laboratory exercises. Prerequisite: Botany 12; high school chemistry, and after 1951-52 elementary college chemistry; or permission of the instructor. Laboratory fee \$10.00 each semester and breakage deposit \$5.00. 4 units. Given in alternate years. Class *MWF*, 8; laboratory *M*, 1:15-4:00.

7. ADVANCED PLANT ECOLOGY (SYNECOLOGY). *Mr. Phillips*. The analysis of plant communities by various types of field sample plots to determine which plants are associated and why; discussions of factors affecting plant geography and the major plant communities primarily of the United States. Prerequisites: Botany 12, 15, 103, and completion of or concurrent registration in Botany 105; or permission of the instructor. Laboratory fee \$8.00 and breakage deposit \$5.00. 3 units. Second semester. Given in alternate years. Class, *MW*, 8; laboratory and field trips *F*, 1:15-4:05 with occasional longer trips. (Omitted in 1951-52.)

8. PLANT ANATOMY. *Mr. Phillips*. A review of the structure of seed plants in preparation of microscope slides with practice on materials partly of the student's own choosing to represent structure or development of plants or for physiological data. Prerequisites, Botany 12, 17, and 107; or permission of the instructor. Laboratory fee \$7.00 and the cost of special materials for the student's slide collection. First semester. 3 units. Given in alternate years. Class *TTh*, 8; laboratory *W*, 1:15-4:00. (Omitted in 1951-52.)

9. PRINCIPLES OF SYSTEMATIC BOTANY. *Mr. Benson*. Principles involved in organizing plant groups according to genetic relationships into families, genera, species, varieties, etc. Methods of exploration for data; classification of native populations, choice of scientific names, and description. Prerequisites, Botany 12, 15, and 105, or permission of instructor. Laboratory and field trip fee \$9.00. First semester. 3 units. Given in alternate years. Class and laboratory *MWF*, 9. Field trips arranged.

10. ADVANCED BOTANICAL PROBLEMS. *Staff*. Special individual work in any field of botany for students with adequate preparation. The student may anticipate preparation of a thesis for the Master's Degree by beginning a problem or continuing one begun in Botany 123, 158, 167, 175 or other courses, or he may work upon any significant problem approved by the instructor. Each semester. 1 to 3 units. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

NC198. Senior Seminar. *Staff.* Review and integration of various phases of botany and the biological sciences. Required of all seniors the year of graduation and of February graduates the preceding year. No credit Arranged; meeting for one hour in alternate weeks. Second semester.

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Graduate work in botany is offered through the Claremont Graduate School. The facilities for research in plant classification are particularly good since the Pomona College Herbarium includes about 300,000 specimens and since the library has been developed primarily for work in this field. For study of ecology, the vicinity of Claremont is exceptionally good, since alpine forest, woodland, chaparral, grassland, ocean shore, and various desert flora are within easy reach. Research may be undertaken in systematic botany, plant physiology, ecology, or some phases of plant morphology. Recently the Rancho Santa Ana Botanic Garden has become affiliated with the Associated Claremont Colleges, and it is being moved to Claremont. Ultimately it will join with Claremont College in offering graduate work in Botany.

Zoology

Three programs of concentration are offered: Zoology; Zoology-Chemistry and Zoology-Botany (Biology). Students interested in pre-medical training should consult the pre-medical course under Pre-professional Programs.

Zoology Concentration. Preparation for teaching (at junior college level), research, or government service. Students interested in any one of the objectives should plan on at least one year of graduate study. Requirements: Zoology 1, 115, 120, 123, and 12 units of upper division courses chosen from Biology, Zoology, and summer courses at the Marine Laboratory.

Zoology-Chemistry Concentration. Preparation for positions allied to medicine such as nursing, medical technology or research assistants. Training in typewriting is recommended. Requirements: Zoology 1, 60, 121, 123; Chemistry 1, 106 and one semester of 110 and 111; Physics 1 or 51; 11 units chosen from Biology 105; Chemistry 107, 109, 110b and 111b; and Zoology 106, 110 and 126.

Zoology-Botany Concentration. Preparation for teaching at the high school level. For requirements consult program listed under Biology.

The Zoology Department is prepared to advise on a program which will permit junior transfer students to complete all requirements for the Bachelor and Master of Arts degrees, and for the teaching credential in three years and two summer sessions. Transfer students may be admitted to upper division courses without the specific prerequisites listed if in the opinion of the instructor they have had equivalent material elsewhere.

Zoology Department of Pomona College in an arrangement with the California Institute of Technology offers summer work at the Kerckhoff Marine Laboratory at Corona del Mar. The 1951 session will run from August 6 to September 8 inclusive. Tuition for full registration (6 units) \$4.00. Further information may be secured from the Department of Zoology.

50. GENERAL ZOOLOGY. *Mr. Pequegnat*. An introduction to all the special topics of modern zoology for those desiring general information concerning animals, as well as for majors in the department. Reference is made to all types of animals, but only those forms which best illustrate important biological principles are studied intensively. No prerequisites. Laboratory fee \$4.00 each semester. 3 units. Class *TTh*, 10; laboratory *W* or *Th* or *F*, 4:05.

MARINE ZOOLOGY AND ECOLOGY. *Mr. Pequegnat*. An elementary course devoted to discussion of biological principles as observed in marine animals. Considerable attention is given to the evolutionary development of the various groups, as well as to their specific identification, their ecological distribution, and their habits. Lecture, laboratory, and field work. Designed especially to fulfill the Biological Science requirement. Offered at the Marine Laboratory. 6 units.

MAMMALIAN ANATOMY. *Mr. Ryerson*. A study of the principles and techniques of anatomy involving a consideration of the various anatomical relationships and trends displayed by mammals including man. Laboratory devoted principally to an intensive dissection of the cat. Prerequisite: one unit of biology or zoology. Laboratory fee \$4.00. 3 units. First semester. Class *M*, 9; laboratory *TTh*, 1:15.

PARASITOLOGY. *Mr. Pequegnat*. An introduction to the general nature of parasitism, including a survey of all types of animal parasites in which the parasite of greatest medical, economic, and social importance to man will receive special consideration. Prerequisite, any one of following: Zoology 1, 11, or Zoology 106. 2 units. First semester. *TTh*, 9. (Omitted in 1951-52.)

PARASITOLOGY LABORATORY. *Mr. Pequegnat*. Study both of prepared slides of significant parasites and their biological vectors, and of living parasites removed from invertebrate and vertebrate hosts. Some time will be devoted to slide preparation. Prerequisite: Zoology 106 (may be taken concurrently). 1 unit. First semester. *T*, 1:15. (Omitted in 1951-52.)

COMPARATIVE VERTEBRATE ANATOMY. *Mr. Pequegnat*. A course embodying an analysis of the phylogenetic changes undergone by the principal vertebrate systems accounting for their present structure, and a comparative study of the structure of modern vertebrates. Laboratory devoted to dissections of non-mammalian vertebrates. Prerequisite: Zoology 60. Laboratory fee \$8.00. 6 units. Second semester. Class *MW*, 9; laboratory *TTh*, 1:15.

COMPARATIVE VERTEBRATE EMBRYOLOGY. *Mr. Amrein*. A study of the development of representative vertebrates from fertilization through organo-

genesis. Prerequisite: Zoology 115. Laboratory fee \$8.00. First semester. 4 units. Class *TTh*, 8; laboratory *ThF*, 1:15.

121. MAMMALIAN PHYSIOLOGY. *Mr. Ryerson*. An introduction to the study of the functions of the organ-systems of mammals, with especial reference to man. Particular attention will be given to the elements of nutrition and to integrative aspects of the endocrine and nervous systems. Prerequisite: Zoology 60. 3 units. First semester, *MWF*, 8.

123. LABORATORY METHODS IN PHYSIOLOGY. *Mr. Ryerson*. Special emphasis on the physiology of the vertebrates. Prerequisites: Zoology 121 (may be taken concurrently), and one year of chemistry. Laboratory fee \$6.00. First semester. 2 units. *MW*, 1:15.

125. HISTOLOGICAL TECHNIQUE. *Mr. Ryerson*. Theory and practice of preparation of vertebrate cells and tissues for microscopical study. Prerequisite: one year of biological science. May be repeated for credit. Laboratory fee \$4.00. 1 unit. Second semester. *F*, 1:15-4:05.

126. COMPARATIVE VERTEBRATE HISTOLOGY. *Mr. Ryerson*. The microscopic anatomy of representative vertebrates. Prerequisite: Zoology 125. Second semester. 3 units. Laboratory fee \$8.00. Class *TTh*, 8; laboratory *T*, 1:15.

128. ENTOMOLOGY. *Mr. Amrein*. A general course in the structure, physiology, and classification of insects. Each student makes his own collection and identification and study. Prerequisite: Zoology 1a or its equivalent. Laboratory fee \$6.00. 3 units. Second semester. Class *T*, 1:15; laboratory *T*, 2:15; *Th*, 1:15.

130. MARINE INVERTEBRATES. *Mr. Pequegnat*. A study of invertebrates residing in the sea from the points of view of their phylogenetic relationships, their morphology, and their physiology. Lecture and laboratory. Laboratory devoted principally to Pacific Coast types. Offered at the Marine Laboratory. 3 units.

150. MARINE ECOLOGY. *Mr. Pequegnat*. A study of marine invertebrates as they exist in the field. Animals are observed and collected in the field and returned to the laboratory for specific identification and observation in the living state. The lectures are devoted to discussion of the distribution of the species observed and the factors which may account for these distribution patterns. The course is so organized that anyone registering for it should either have a thorough grounding in the morphology and physiology of marine invertebrates or take Zoology 130 concurrently. Offered at the Marine Laboratory. 3 units.

152a, 152b. ECOLOGY OF THE VERTEBRATES. *Mr. Pequegnat*. A study of the land vertebrates, principally of this region, considering the bases of classification, life histories, adaptations to the environment, populations, and the factors which account for their present distribution. First semester devoted principally to birds and mammals; second semester to amphibians and reptiles. 2 units each semester. Prerequisite: one year of biological work. Class *T*, 1:15; laboratory *W*, 1:15-4:05.

ZOOLOGY PROSEMINAR. *Staff.* Discussion of selected topics of current interest to zoologists. Each semester. Open to all levels. No credit. *T, 4:15.*

INTRODUCTION TO RESEARCH IN ZOOLOGY. *Staff.* Open to those students concentrating in zoology or pre-medicine on consent of the staff. Each semester 1 to 3 units. May be repeated for credit. Laboratory fee \$2.00 per unit. Offered at Marine Laboratory as well as at Claremont. Arranged.

Chemistry

Concentration Requirements: Chemistry 1, 59, 106, 107, 109, 110, 111, 158, 159; Physics 51; Mathematics 1, 65.

Professional Program: Students who plan professional work in Chemistry should follow the suggested program below. It is based upon the recommendations of the American Chemical Society Committee for Professional Training of Chemists. Pomona College has been placed upon the approved list by this committee. The schedule is intended as a guide only for aid in planning the program and individual deviations may be made as needed.

Freshman Year: Chemistry 1 or 59, 106; Mathematics 1; English 1; Electives.

Sophomore Year: Chemistry 59-106 if not taken in first year, 110, 111; Mathematics 65; Physics 51; German 1; Electives.

Junior Year: Chemistry 107, 158, 159; German 53; Electives.

Senior Year: Chemistry 109, 112, 184, 185, 187 (181 and 199 also recommended but not required to satisfy ACS certification); Electives.

Biology-Chemistry Concentration: Zoology 1, 60, 121, 123; Chemistry 1, 59, 106 and one semester of 110, 111; Physics 1 or 51; 11 units chosen from Chemistry 110b, 111b, 107, 109; Biology 105; Zoology 106, 107, 126.

Botany-Chemistry Concentration: See Botany

Preparation for Teaching: Students who plan to teach in secondary schools should consult the department before registration for the junior and senior years. By proper coordination of work it is possible to obtain the Masters degree in Chemistry and the general secondary credential upon completion of graduate work for one year plus two summer sessions.

Three Year Program for Junior College Graduates: Transfer students from Junior Colleges may be able to plan a three year program leading to the Masters degree and/or a secondary credential. The departmental chairman should be consulted for details.

Fees: A fee is required for each laboratory course, to cover the cost of chemicals. In addition a locker deposit must be made to cover breakage and loss of equipment. The unused balance of the deposit is returned at the end of the year.

1a, 1b. **INTRODUCTORY CHEMISTRY.** *Mr. Pierce.* Beginning course to acquaint the student with basic laws of chemistry and reactions of the more common elements. 3 units. Lectures, *TTh*, 9. Laboratory *Th* or *F*, 1:15-4:05. Fee, \$6.00 each semester. Deposit, \$5.00 for the year.

Second Year Chemistry. The courses in qualitative and quantitative analysis, Chemistry 59, 106, are coordinated to give an advanced review of chemical principles along with the study of analytical methods. Exceptionally well prepared students may omit Chemistry 1 and start with 59.

59. **QUALITATIVE ANALYSIS.** *Mr. Smith.* The lectures deal with application of the principles of chemical equilibrium to the separations and identification of the common ions, and with the chemical reactions of these ions. Semimicro analytical procedures are used. Prerequisite: Chemistry 1 or consent of instructor. 4 units. Fee, \$6.00, deposit, \$5.00. First semester. Lecture *MW*, 10. Laboratory, *M*, 2:15-5:05; *T*, 1:15-4:05.

106. **BEGINNING QUANTITATIVE ANALYSIS.** *Mr. Pierce.* The lectures deal with the theory and practice of analytical methods and with selected topics of inorganic chemistry. Prerequisite: Chemistry 59. 4 units. Fee, \$8.00, deposit \$5.00. Second semester. Lectures, *MW*, 10. Laboratory, *M*, 2:15-5:05; *W*, 1:15-4:05.

107. **ADVANCED QUANTITATIVE ANALYSIS.** *Mr. Pierce.* Prerequisite, Chemistry 106 or equivalent. 3 units. Fee \$8.00, deposit \$5.00. First semester. Laboratory *M*, 2:15-5:10 and *TW*, 1:15-4:05.

109. **THEORY OF QUANTITATIVE ANALYSIS.** *Mr. Pierce.* Lectures and problem assignments on complex equilibria, oxidation potentials and more advanced theory of quantitative separations. Prerequisite, Chemistry 106 or equivalent. 1 unit. First semester. Lecture *W*, 9.

110a, 110b. **ELEMENTARY ORGANIC CHEMISTRY.** *Mr. Hansch.* The first semester is a survey of organic chemistry including aliphatic and aromatic chemistry. The second semester is a more detailed study of some of the more advanced organic reactions. Prerequisite, Chemistry 1 or equivalent. 3 units. Lectures *MWF*, 11.

111a, 111b. **INTRODUCTION TO ORGANIC LABORATORY METHODS.** *Mr. Hansch.* First semester, instruction in laboratory operations and organic preparations. Second semester, organic preparations and introduction to qualitative organic analysis. 1 unit. Fee \$6.00, deposit \$5.00 each semester. Laboratory *F*, 1:15-4:05.

112b. ORGANIC SYNTHESIS. *Mr. Hansch.* Advanced preparations to complement the laboratory work of Chemistry 111. Open only to students completing the pre-professional program. 1 unit. Prerequisite, Chemistry 110, 111. Fee \$7.50, deposit \$5.00 each semester. Laboratory *Th*, 1:15-4:05.

158b. PHYSICAL CHEMISTRY. *Mr. Smith.* Prerequisite Chemistry 106, Physics 51, Mathematics 65. Chemistry 110 may be taken concurrently. 3 units. Lectures *TThS*, 10.

PHYSICAL CHEMISTRY LABORATORY. *Mr. Smith.* Prerequisite, Chemistry 158a. 3 units. Fee \$10.00, deposit \$5.00. Second semester. Laboratory *M*, 2:15-4:05 and *TW*, 1:15-4:05.

181b. CURRENT TOPICS IN CHEMISTRY. *Staff.* Oral reports by students and faculty on contemporary chemical research. Objectives are the training of students in the use of chemical literature and in the clear presentation of scientific results. Prerequisite, Chemistry 110, 158 (may be taken concurrently) and reading knowledge of German. 1 unit. Arranged.

ADVANCED ORGANIC CHEMISTRY. *Mr. Hansch.* A survey of current theories of organic reaction mechanisms. Prerequisite, Chemistry 110, 158a. 3 units. Second semester. Lectures *MWF*, 9.

ADVANCED INORGANIC CHEMISTRY. *Mr. Smith.* The lectures will include discussion of atomic and molecular structure as related to spectra, and such selected topics as coordination compounds, nuclear chemistry, chemistry of the lanthanide and actinide series, and the chemistry of hydrides and non-metallic oxides. Prerequisites: Chemistry 107, 110, 158 (may be taken concurrently). 3 units. First semester. Lectures *MWF*, 9.

QUALITATIVE ORGANIC ANALYSIS. *Mr. Hansch.* The use of systematic procedures for the identification of organic compounds. Prerequisite, Chemistry 106, 110, and reading knowledge of German. 3 units. Fee \$7.50, deposit \$5.00. First semester. Laboratory *W*, 1:15-4:10, plus two arranged periods.

192b. SPECTROCHEMICAL ANALYSIS. *Mr. Pierce.* Training in the operation of the spectrograph, use of excitation sources, qualitative analysis of a variety of samples, densitometry, preparation of working curves, and quantitative analysis. Each student is expected to prepare and test a working curve for a specific analysis. Assigned readings and frequent conferences in addition to laboratory work. Prerequisite, Chemistry 107, 158, and consent of instructor. Must be taken for a total of 6 units, but may be started either semester. 3 units. Fee \$10.00 plus cost of supplies (film and electrodes). Arranged.

UNDERGRADUATE RESEARCH. *Staff.* Seniors may take 6 units of research in Physical, Organic or Analytical Chemistry, under direction of a staff member. The work may be taken in one semester or extended over two. A thesis is required. Prerequisite, average of B in chemistry courses and consent of instructor. Fee \$3.00 per unit, deposit \$5.00. Each semester. Arranged.

NC 171. GLASSBLOWING. *Mr. Smith.* Training is given in the fundamental operations involved in the construction of scientific glass apparatus (in seals, metal to glass seals, construction of mercury vapor pump and McLeod gauge). Academic credit toward graduation is not given for this course; the registrant receives a recorded grade indicating the proficiency attained, 2 units. Either semester. Fee \$7.50 plus cost of glass used. Laboratory arranged.

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Graduate work leading to the M.A. degree is offered under auspices of the Claremont Graduate School. The Claremont catalog should be consulted for details.

Classics

In the interest of providing a maximum offering in Classics, a coordinated program is offered by the departments of Pomona and Scripps College. This broad program is thereby assured to meet the needs of all students who desire training in Latin and Greek or in the literature of Classical Antiquity in translation. Mr. Carroll will gladly advise Pomona students regarding opportunities in this program, and will assist in developing programs of study which will meet basic requirements.

GREEK

51A-51B. ELEMENTARY GREEK. *Mr. Carroll or Mr. Palmer (Scripps).* A study of the principles of Greek grammar for beginning students. The course is designed to provide a firm foundation for the further study of the language and its literature. Simplified reading materials will be utilized as fully as possible. 3 units. *MWF, 8.*

101A, 101B. INTERMEDIATE GREEK. *Mr. Carroll or Mr. Palmer (Scripps).* For students who have had Greek 51A-51B or equivalent. A reading course in Greek with selections from the Apology of Socrates, Homer's *Odyssey*, Euripides' *Medea*, the Greek New Testament and Church Fathers. 3 units. Arranged.

LATIN

1A-1B. ELEMENTARY LATIN. *Mr. Carroll or Mr. Palmer (Scripps).* Latin grammar and syntax for students with no secondary school Latin. The aims and purposes of individual students enrolled will be particularly considered by the instructor in this course. Its general goal is to develop an ability to read Latin as quickly as possible, and to make use of that ability for a further understanding of the language. 3 units. *MWF, 8.*

57A, 57B. INTERMEDIATE LATIN. *Mr. Carroll.* For students with one or two years of secondary school Latin, or Latin 1A-1B. Selected readings from Sallust, Cicero, Vergil, Ovid, St. Augustine, and the Vulgate Bible. Or

translation and discussions of grammar and syntax will be coordinated with lectures on the history of Latin literature. Emphasis will be on reading Latin as a living language. Attention will be given to the needs of the individual student in preparation of reading program. 3 units. Arranged.

55a, 117b. ROMAN WRITERS OF THE REPUBLIC. *Mr. Carroll or Mr. Palmer (Scripps)*. A survey in Latin of the outstanding Roman writers in the second and first centuries B.C. An intensive study of a single author will be made during the second semester of the course. Open to all students who have had three years or more of secondary school Latin or the equivalent. Year course. Arranged. (Omitted in 1951-52.)

55a, 118b. ROMAN WRITERS OF THE EMPIRE. *Mr. Carroll or Mr. Palmer (Scripps)*. A survey in Latin of the outstanding Roman writers in the first and second centuries A.D. An intensive study of a single author will be made during the second semester of this course. Open to all students who have had three years or more of secondary school Latin or equivalent. 3 units. Arranged.

GREEK AND ROMAN LITERATURE IN TRANSLATION

55a, 160b. CLASSICAL EPIC, DRAMA AND PROSE IN THE WESTERN HERITAGE. *Mr. Carroll*. A course in general education for all students desiring orientation in the culture of the Graeco-Roman world and its legacy to modern civilization. No previous training is required in Classical languages or Ancient History. A broad program of lectures covering the salient phases of ancient literature and art will be integrated with a reading program in translation including Homer, Vergil, the Classical dramatists, Thucydides, Tacitus, Aristotle and St. Augustine. An effort will be made to trace the principal intellectual currents of antiquity and to indicate their influence upon modern art, literature and society. 3 units. *MWF, 11.*

AVAILABLE AT SCRIPPS COLLEGE

55-16. GREEK AND ROMAN COMEDY AND SATIRE. *Mr. Palmer*. A course designed to cover in English translation the dramas of Aristophanes, Menander, Plautus, and Terence and the literature of the outstanding Greek and Roman writers in the field of satire. Lectures will be given on the history of the development of the theatre, on the history of comedy and the mime, and on the development of satire and satiric forms. Year course. Arranged. (Omitted in 1951-52.)

55-17. GREEK AND ROMAN TRAGEDY. *Mr. Palmer*. A course designed to cover in English translation the dramas of Aeschylus, Sophocles, Euripides and Seneca. Lectures will be given on the history of the development of the theatre, on the history of tragedy, and on the development of the tragic form. 3 units. Arranged.

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HISTORY OF GREECE. For description see History 101.

HISTORY OF ROME. For description see History 102.

ANCIENT ART AND ARCHAEOLOGY. For description see Art 55a, 55b.

Comparative Literature

Concentration in Continental Literature. Designed for students who interested in European Literature.

Requirements: 24 units in courses numbered over 100. Twelve of the units must be in Continental Literature (in translation), twelve in European or classic literature in the original language. Electives in English literature and Classics 160a, b are strongly recommended.

148a, 148b. READINGS IN CONTINENTAL LITERATURE IN TRANSLATION. *M. Baumann.* A study of outstanding works of Cervantes, Molière, Goethe, Flaubert, Balzac, Tolstoy, Ibsen (for Juniors and Seniors only). 3 units. Arranged. (Omitted in 1951-52.)

181a, 181b. READINGS IN CONTINENTAL LITERATURE IN TRANSLATION. *M. Baumann.* A study of outstanding works of Dante, Montaigne, Stendhal, Tolstoy, Dostoevsky, Thomas Mann, and others. Open to Seniors. Others admitted only on permission of the instructor. 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

I-152a, 152b. COMPARATIVE LITERATURE. *Mr. Merlan.* Year course. 4:15-6:05.

Economics

A concentration program in Economics is suggested in general for those who wish to understand the nature and operation of the economic system in which they live and in particular for the student who contemplates a career in business, law, teaching, or research. Emphasis in the training is on sources of information and processes of analysis which are essential to leaders in the business and professional world.

Prerequisites: Lower division courses, Economics 5a, 51, and 57. Economics 51, or equivalent, is a prerequisite for all advanced courses in economics.

Required courses: Economics 103, 104, 190 and other courses in economics to bring the total of upper division courses to 24 units.

Recommended program: Economics 5 in the freshman year, Economics 51 and 57 in the sophomore year, Economics 103, 104, 109, 110 in the junior year, and Economics 190 and other courses in the field of the student's special interest during the senior year.

Pre-Professional programs: Students planning to take graduate work in business administration or law should include courses in English writing, literature, speech, psychology, and philosophy in addition to courses

ernment, history, and sociology. Courses in mathematics and in one or more foreign languages are strongly recommended particularly for those intending to take graduate work in economics in preparation for a career in teaching or research.

Honors Study: A student who wishes to major in Economics and pursue an individualized program of honors study should confer with a member of the department during his sophomore or junior year.

Junior Transfers: Transfer students should consult with some member of the Economics staff with a view to adjusting their programs so as to achieve satisfactory concentration.

Three-Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three-year program enabling them to earn both the B.A. and M.A. degrees. The work for the Master's degree may be taken in economics, business & public administration, or in political economy.

In addition, the Claremont Summer Session, sponsored jointly by the four Associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them, within a three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

COMBINED INTRODUCTORY COURSE IN ECONOMICS AND GOVERNMENT

For the benefit of a limited number of students unable to include in their programs a full year each of economics and government, these two Departments cooperate in offering the combined course described below. It may be offered in fulfillment of one of the requirements for distribution in the lower division but not in combination with either Economics 51 or Government 51, which are the recommended courses. The two halves of the course may be taken in either order or concurrently. Credit will not be given for the completion of only one half of the course.

Economics 1a. AMERICAN ECONOMIC SYSTEM. Staff. A study of fundamental economic institutions, problems and processes special attention being given to factors which determine national income, employment and production. (Substantially equivalent to Economics 51a.) 3 units. First semester, *TThS*, 10. Second semester, *TThS*, 8.

Government 1b. AMERICAN POLITICAL SYSTEM. Staff. A study of basic political institutions, problems and processes, with emphasis on the Constitution, democracy, federalism and the functions of legislation and administration. (Substantially equivalent to Government 51b.) 3 units. Second semester, *TThS*, 10.

ECONOMICS

5a, 5b. ACCOUNTING. *Mr. Oliver*. A study in theory and method, develop from the balance sheet the fundamental principles underlying alike construction and interpretation of financial records. Open to freshmen. 3 units. Two sections: *TTh*, 9 and 10. Laboratory, *W* or *F*, 1:15-3:15.

51a-51b. PRINCIPLES OF ECONOMICS. *Staff*. The basic course in economics both majors and non-majors. The nature and operation of the American economic system and its place in the world economy. Includes current economic problems and related public policies. Not open to freshmen. 3 units. *MWF*, 8 and 9; *TThS*, 8 and 10.

57. STATISTICS FOR THE SOCIAL SCIENCES. *Mr. Break*. A course in the application of quantitative method to economic and social problems with emphasis on the interpretation of the results obtained. Frequency series and time series analysis, elementary sampling, simple correlation, construction and interpretation of index numbers. (Credit will not be given for both Economics 57 and Psychology 102.) 3 units. First semester. *TThS*, 9. Laboratory, *T*, 2:15-4:15 or *Th*, 2:15-4:15.

65. CONSUMER ECONOMICS. *Mr. Perry, Mr. Bond*. A course designed primarily to meet the needs of the student who is not majoring in economics yet wishes to secure basic information concerning personal financial problems. Includes a study of insurance, home ownership, investments, budgeting, credit purchases, banking procedures, and consumer loans. Prerequisite: Economics 51a or Political Economy 1a. 2 units. Second semester, *TTh*, 9.

66. PROBLEMS IN CONSUMER ECONOMICS. *Mr. Perry, Mr. Bond*. For students enrolled in Economics 65. Each student will be required to pursue supervised study on some problem in the field. Permission of instructor required. 1 unit. Second semester, *S*, 9.

ADVANCED COURSES

Economics 51 or equivalent is prerequisite for all advanced courses in Economics.

103. MONEY AND BANKING. *Mr. Bond*. Principles of money, credit, and banking interpreted in the light of the institutions and financial organizations designed to supply society with adequate media of exchange. The relationship of money, income, and prices, and the problems of monetary management and fiscal policy. 3 units. First semester. *TThS*, 10.

104. ECONOMIC THEORY AND BUSINESS POLICY. *Mr. Bond*. A study of the organization of economic activity through markets and prices with emphasis on the analytical method in economics; resource use and income division in markets containing various mixtures of competition and monopoly; the relationship between economic analysis and business practice. 3 units. First semester. *MWF*, 10.

. CORPORATION FINANCE. Principles underlying the promotion, financial structure and control, failure, and reorganization of corporate enterprise. Prerequisite: Economics 5, or equivalent training in accounting. 3 units. First semester. (Omitted in 1951-52.)

. PUBLIC FINANCE. *Mr. Break.* A study of government taxing and spending policies and of their effect on the volume of production and employment, the price level, and the distribution of income. Special attention is given to the problem of the public debt and to proposals for tax reform. 3 units. Second semester. *TThS, 10.*

. INDUSTRIAL ORGANIZATION AND PUBLIC POLICY. *Mr. Bond.* A study of basic American policy of maintaining competition to control economic behavior with some consideration of agricultural policy, utility regulation, and other forms of industrial control. Case studies of specific firms and industries and the work of the Antitrust Division and Federal Trade Commission are emphasized. 3 units. Second semester. *MWF, 10.*

. LABOR ECONOMICS. *Mr. Perry.* An examination of the tools of economic analysis in their relation to problems of labor. A brief history of organized labor is followed by an analysis of such problems as labor productivity, minimum wage legislation, maintenance of full employment, and union wage and hour policies. Economics 104 or equivalent is desirable but not required as a prerequisite. 3 units. First semester. *MWF, 9.*

150b. ADVANCED ACCOUNTING. *Staff.* Advanced accounting theory and practice applied to the managerial problems of valuation and operation in various types of business concerns. Accounting for the organization and liquidation of co-partnerships and corporations, for combinations and consolidations, for trusts, estates, receiverships, and branches. To be offered if sufficient demand. 3 units. Prerequisite: Economics 5 or equivalent. *TThS, 8.*

. INTERREGIONAL TRADE. *Mr. Oliver.* A study of trade principles, problems, and policies. Topics include the balance of payments and the processes of its equilibrium, international commercial policies and trade agreements, the international monetary fund and the world bank, and the problem of world reconstruction. 3 units. First semester. *MWF, 8.*

. ADVANCED STATISTICS. *Mr. Break.* More advanced work in the subjects already covered in Economics 57; includes analysis of variance, chi-square tests, and multiple and partial correlation. 3 units. Second semester. *TThS, 9* and *Th, 2:15-4:15.*

. HISTORY OF ECONOMIC THOUGHT. *Mr. Perry.* A survey of the development of economic science and policy from the forerunners of the classical school to the present date with emphasis on those aspects of economic doctrine which contribute most to an understanding of the present status of the field of economics. 3 units. Second semester. *MWF, 9.*

191. MONETARY THEORY. *Mr. Bond.* A systematic study of the theoretical tools of analysis used in consideration of the economic system as a whole. Emphasis is placed upon monetary and general equilibrium theory. Prerequisite: Economics 104 and permission of instructor. 3 units. Second semester. Arranged.

192. BUSINESS CYCLES. *Mr. Oliver.* An introduction to the general problem of economic change; the history, theory, and measurement of business cycles together with study of theories of cyclical stabilization. 3 units. Second semester. *MWF, 8.*

198. INTRODUCTION TO RESEARCH. *Mr. Perry.* Supervised advanced study in any field of economics. Each student will pursue an individual research project which will provide the basis for oral reports, group discussion, and a final written research report. Open to qualified seniors with the permission of instructor. 3 units. First semester. *MWF, 11.*

199. READINGS IN ECONOMICS. *Mr. Bond.* Senior seminar devoted to the study of current economic problems and policies with emphasis on sources of information and the use of tools acquired in earlier courses. Selected readings, reports, written exercises. Open to qualified seniors with permission of instructor. 3 units. Second semester. *MWF, 11.*

BUSINESS LAW. For description, see Government 106.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ACCOUNTING FOR BUSINESS CONTROL. *Mr. Gibbs.* 3 units. Second semester.

TAX ACCOUNTING. *Mr. Briggs.* 3 units. Second semester.

MARKETING. *Mr. Henninger.* 3 units. First and second semester.

FOREIGN TRADE. *Mr. DeHaas.* 3 units. Second semester.

PERSONNEL ADMINISTRATION. *Mr. Phelps.* 3 units. Second semester.

CORPORATION FINANCE. *Mr. Taylor.* 3 units. Both semesters.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

Open to qualified seniors with the permission of the chairman of the department and the instructor of the graduate seminar. For other graduate courses, consult the catalog of The Claremont Graduate School.

205. PRICE THEORY. *Mr. Vandermeulen.* 4 units. First semester.

206. MONETARY THEORY AND POLICY. *Mr. Bond.* 4 units. Second semester.

212. INDUSTRIAL RELATIONS. *Mr. Perry.* 4 units. Second semester.

216. TAXATION. *Mr. Break.* 4 units. First semester.

218. INTERNATIONAL ECONOMIC RELATIONS. *Mr. Oliver.* 4 units. First semester.

Education

The courses in Education in Pomona College are designed to supply the general background that an intelligent citizen should have regarding one of our important social institutions and at the same time to prepare a prospective teacher or administrator for the more technical training given in the Claremont Graduate School or in some other graduate institution.

Requirements for concentration: 24 units of work in courses numbered over 100, as prescribed below.

Prerequisite courses: Education 53a, 53b; Psychology 51a-b; Government 51a-b; Sociology 51. *Required courses:* Education 104, 105, 151, 187; Sociology 106 or 152; Psychology 107, 108 (or equivalent course at Scripps College); Government 103 or 104. Courses beyond the concentration will vary with the individual student but the program should include further work in psychology and sociology as well as some contact with such fields as: art, English, geography, history, life sciences, music, physical education, and speech. Students anticipating teaching in Southern California are urged to acquire some familiarity with the Spanish language.

53a, 53b. INTRODUCTION TO EDUCATION. *Mr. Lee.* The basic course in Education, designed for those who desire an understanding of the place and function of education in America today. An introductory study of the educational programs and processes in a democracy and the fundamental responsibility of the citizen for their effective operation. While the listed order is preferable, the two halves of the course may be taken in either order. 3 units. Two sections, *MWF, 8, 9.*

54. HISTORY OF EDUCATION: EUROPEAN AND COMPARATIVE. *Mr. Lee.* A study and appraisal of the European roots of contemporary American educational traditions and practices, with some attention to the contemporary educational policies and practices in foreign countries. History 1 and 55 or equivalent and Education 53 recommended as preparation. 3 units. First semester. *MWF, 11.*

55. HISTORY OF EDUCATION: UNITED STATES. *Mr. Lee.* A study of the growth and evolution of education in the United States. Stress is placed upon intellectual, social, and economic forces which shaped educational developments. History 1 and 55 or equivalent and Education 53 and 104 recommended as preparation. 3 units. Second semester. *MWF, 11.*

51. INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. *Mr. Lee.* A study of the major philosophical foundations of contemporary American education. With the contributions of historical philosophies and contemporary developments in educational thought will be examined. An attempt to answer the question: What kind of education for modern America? 3 units. First semester. *MWF, 11.* (Omitted in 1951-52.)

187. FUNDAMENTAL ISSUES IN CONTEMPORARY AMERICAN EDUCATION. Mr. . . . An introduction for all students to some of the major issues confronting American education today. The course will consider such problems as: content of the curriculum, religion and public education, academic freedom and federal aid to education. 3 units. Second semester. *MWF, 11.* (Offered in 1951-52.)

THE TEACHING OF MATHEMATICS. For description see Mathematics 228.

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A wide range of graduate work in Education leading to the various credentials as well as to the degree of Master of Arts is offered under the auspices of the Claremont Graduate School.

English

English 1 or its equivalent is prerequisite for all other departmental courses. English 50 and History 1 are required of all students intending to concentrate in the Department of English.

A reading knowledge of at least one language and literature other than English, as well as high school preparation in Latin, is strongly recommended. In most graduate schools, candidates for the degree of Doctor of Philosophy are required to have a reading knowledge of *two* foreign languages.

Electives should be chosen, in consultation with the adviser, from courses in Speech and Dramatics, foreign literature, the history of England, history of philosophy, and (especially for students interested in writing) elementary applied art.

Transfer students may offer equivalent courses pursued at other colleges in fulfillment of these requirements and recommendations.

CONCENTRATION WITH EMPHASIS ON LITERATURE

Students who are concentrating in literature must choose from each of the four groups below at least the number of units specified:

Group I (9 units): ENGLISH 101 *or* 155 *or* 153 *or* 154.

Group II (6 units): ENGLISH 103 *or* 105.

Group III (6 units): ENGLISH 104 *or* 192 *or* 193.

Group IV (6 units): ENGLISH 194 *and* 195.

A brief reading list, designed to acquaint students with the major figures in English literature, will supplement course assignments in the program of concentration. The books on this list, many of which will already have been read in other courses, will be included in the comprehensive examination.

CONCENTRATION WITH EMPHASIS ON WRITING

The following pattern of courses must be completed, for a total of at least 27 units, by students concentrating in writing:

1. Upper-division courses in composition (111, 151; Speech and Dramatics 152): 6 to 12 units. Note that certain courses in composition may be repeated for credit under proper conditions.

2. English 101 or 153 or 154 or 155: 6 units.

3. English 103 or 104 or 105 or 194: 6 to 9 units.

4. English 192 and 193: 6 units.

(Note: Students who graduate before September, 1952, may satisfy the requirements for concentration with emphasis on writing by following a slightly different pattern of courses, outlined in the *Catalog* for 1950-51.)

A course in elementary applied art, taken in the Freshman or Sophomore year, is strongly recommended to students who intend to concentrate with emphasis on writing.

A list of readings, stressing the principles of literary criticism and illustrating the theory and techniques of writing, will supplement regular coursework in this program of concentration.

Information concerning Honors programs and projected graduate work in English may be had from the Departmental Staff.

1b. ENGLISH: AN INTRODUCTORY COURSE. *Departmental Staff*. A brief review of the fundamentals of composition; instruction and practice in writing; reading and study of a few important literary types. Normally prerequisite for all other departmental courses. Students with marked deficiencies in the use of English may be required to meet for a fourth hour (arranged). 3 units. Section meetings *MWF*, 8; *TThS*, 8; *MWF*, 9. Section 1b first semester for specially qualified students *TThS*, 9.

5a, 5b. GREAT ENGLISH AUTHORS. *Mr. Weismiller, Mrs. Jordan, Mr. Angell*. A study of selected works of poetry and prose as representative major contributions to the literature of our cultural heritage. First semester: Chaucer, Spenser, Milton, and readings in the English lyric. Second semester: Swift, Pope, Wordsworth, Carlyle, Arnold, Yeats, Eliot. No student will be admitted to the second semester of the course who has not completed English 5a or an equivalent. 3 units. *MWF*, 11; *TThS*, 9.

5. INTRODUCTION TO POETRY. *Mr. Holmes*. A study of the principal aims and techniques of poetry. Readings in a wide variety of poetic types. 3 units. First semester. *TThS*, 10.

5. INTRODUCTION TO DRAMA. *Mr. Davis*. Great plays of various periods from the classic Greek to the present day; as extensive reading as time will permit. 3 units. First semester. *MWF*, 10.

5. INTRODUCTION TO PROSE FICTION. *Mr. Angell, Mr. Beatty*. A general survey of important works in prose fiction with emphasis upon selected novels—English, American, and continental—from the eighteenth century to the present. 3 units. Second semester. *MWF*, 10; *TThS*, 9.

63. EXPOSITORY WRITING. *Mr. Bracher*. A course in the principal methods used in explaining processes, theories, and the results of special investigations. The course is designed to meet the needs of the student who wishes further practice in expository writing, especially the student who is preparing for a career in business or one of the professions, such as law, medicine, or scientific research. Enrollment limited to 25 students. 3 units. Second semester *MWF, 11*.

64. NARRATIVE AND DESCRIPTIVE WRITING. *Mr. Weismiller, Mr. Mulhauser*. A course for students who, having shown some ability as writers in English or its equivalent, wish to continue with the basic creative problems of narration and description. Laboratory exercises, assigned problems, and discussions. This course is a prerequisite for English 111 and 151. Enrollment limited to 25 students each semester; if the registration for the course exceeds this number, the selection of the students to take the course will be made at the first class meeting. 3 units. First semester, *TThS, 9*; second semester *TThS, 10*.

ADVANCED COURSES

English 1 or an equivalent is prerequisite for all advanced courses in English.

101a, 101b. THE RENAISSANCE IN ENGLAND. *Mr. Strathmann*. English literature of the Renaissance, chiefly non-dramatic, with emphasis upon Renaissance thought and the development of English literary forms. In the first semester the principal writer studied is Spenser; in the second semester, Milton. 3 units. *MWF, 9*. (English 101a will be omitted in 1951-52.)

103a, 103b. LITERATURE OF THE EIGHTEENTH CENTURY. *Mr. Bracher*. A survey of English literature from 1660 to 1800. Main topics: first semester, Restoration drama, neo-classic literary theory, the works of Dryden, Swift, and Pope; second semester, the beginnings of the novel, pre-romantic poetry. Dr. Johnson and his circle. 3 units. *MWF, 10*.

104a, 104b. LITERATURE OF THE NINETEENTH CENTURY. *Mr. Angell, Mr. Mulhauser*. An intensive study of the major poets and prose-writers of the nineteenth century, with emphasis on literature as (1) an artistic expression of the emotions, and ideas of the individual writer, and as (2) a reflection of the important, intellectual, historical, and literary movements of the century. First semester, writers of the Romantic period; second semester, writers of the Victorian period. 3 units *TThS, 9*.

105a, 105b. AMERICAN LITERATURE. *Mrs. Jordan*. The literature of the United States, from the colonial period to the twentieth century, with emphasis upon the development of a national culture. Representative writers studied are: in the first semester, Edwards, Irving, Cooper, Emerson, Thoreau, and Hawthorne; in the second semester, Poe, Melville, Whitman, Mark Twain, Henry James, and Dreiser. 3 units. *TThS, 10*.

2. THE SHORT STORY. *Mr. Mulhauser.* Practice in the writing of short stories and sketches. Consideration of the critical principles of the short story and criticism of both student and professional work. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students. Prerequisite: English 64 and permission of the instructor. 3 units. First semester. *T, 1:15-3:05, and F, 1:15.*

3. CREATIVE WRITING. *Mr. Weismiller.* Supervised practice in the forms of creative writing, selected according to the needs and abilities of the students enrolled in the course. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students. Prerequisites: English 64 and permission of the instructor. 3 units. Second semester. *T, 1:15-3:05, and F, 1:15.*

4. CHAUCER. *Mr. Davis.* A study of Chaucer as the outstanding narrative and dramatic poet of the transition from the medieval to the modern world. 3 units. Second semester. *MWF, 9.*

5. THE ENGLISH LANGUAGE. *Mr. Bracher.* A survey of the English language from its origins to the present. Principles of linguistic change, as an aid to understanding of modern English usage. Especially recommended to prospective teachers. 3 units. First semester. *MWF, 9.*

6. SHAKESPEARE. *Mr. Davis, Mr. Strathmann.* A study of the principal plays and of Shakespeare's career as a dramatist, with attention to the working conditions of the Elizabethan stage and collateral reading in drama contemporary with Shakespeare. First semester, mainly comedies and histories; second semester, mainly tragedies. 3 units. *MWF, 11.*

7. CONTEMPORARY NOVELISTS. *Mr. Mulhauser.* A study of the novels of Dickens, Lawrence, Joyce, Woolf, and Faulkner, with emphasis upon the principles of narrative art and the philosophical points of view of these novelists. 3 units. First semester. *MFW, 10.*

8. CONTEMPORARY POETS. *Mr. Weismiller.* Poets of the twentieth century, from Gerard Manley Hopkins to the present, studied in the light of the great poetic tradition. 3 units. Second semester. *MWF, 10.*

9. LITERARY CRITICISM. *Mr. Angell, Mr. Holmes.* A study of the principles of literary criticism. Selected readings in the masterpieces of criticism from ancient times to the present, with emphasis on the theories and forms of poetry, fiction, and drama. 3 units. First semester. Two sections: *WF, 2:5-3:30.*

10. READINGS IN ENGLISH LITERATURE. *Mr. Davis, Mr. Angell.* A seminar open to seniors concentrating in English. Lectures, readings, and reports directed toward a synthesis, on the student's part, of his work in English. 3 units. Second semester. Two sections: *WF, 2:15-3:30.*

CHARACTER PRESENTATION IN DRAMATIC LITERATURE. For description Speech and Dramatics 61a, 61b.

PLAYWRITING. For description see Speech and Dramatics 112a-112b.

AVAILABLE AT SCRIPPS COLLEGE

I-104. BROWNING. *Mr. Dunn*. First semester, MWF, 10.

I-116a, b. SHAKESPEARE. *Mr. Dunn, Mr. Hard*. Year course. MWF, 11. C will not be given for both I-116 and 155b.

I-119. ADVANCED WRITING. *Mr. Armour*. Registration limited. Year cc TThS, 10.

I-141a, b. AMERICAN SOCIAL LITERATURE. *Mr. Foster*. Year course. MW

I-144. THE ROMANTIC POETS. *Mr. Armour*. Year course. MWF, 8. Credit not be given for I-144 and English 104a.

I-145. MILTON. *Mr. Armour*. Second semester. MWF, 10.

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The opportunity for graduate work in English provided in the Clare Graduate School is quite extensive. The student who purposes to go on graduate study is advised to plan his whole course from at least as early as his junior undergraduate year.

Geography

AVAILABLE AT SCRIPPS COLLEGE

V-103. THE NATURAL SETTING OF THE SOUTHWEST. *Miss Smith*. First semester. (Continuation in second semester by permission only.) TTh, 2:15-4:

Geology

Geology 1 is an introductory survey course. It is designed to give a general appreciation of the features and processes at the earth's surface to the technical student and is a prerequisite for most of the more advanced courses in the department. The other courses are designed for persons intending to specialize in geology or a related science.

A student concentrating in geology should include courses 1, 2, 59, 110, 112, 181, 182, an approved summer field course, and either 107 or 108. Required in other departments: Mathematics 1, 65; Physics 51; Chemistry 101 and a reading knowledge of German, Spanish or French (German preferred). Geology 161 and Pre-Engineering 7 and 40 are very desirable. In exceptional cases courses in biology may be substituted for those in physics and chemistry. Rarely the requirement of a summer field course is waived.

Seniors graduating in geology must write an acceptable thesis based on work done in Geology 181, 182, and take a 2 or 3 hour written examination on the fundamentals of geology, followed by a brief oral examination on topics suggested by the thesis or the examination paper.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 52; Geology 59, 110, and 112, plus 11 additional upper-division units totaling a minimum of 24, selected from Astronomy 151 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 161. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

1b. INTRODUCTION TO GEOLOGY. *Mr. Shelton.* A survey of geologic principles and processes, and of earth history. Must be accompanied by Geology 2. Units. *MWF, 10.*

2b. LABORATORY AND FIELD TRIPS SUPPLEMENTING GEOLOGY 1a-1b. *Staff.* Open to students who are taking or have taken Geology 1 or its equivalent. Prerequisite for all more advanced courses in geology except 59. Fee \$3.00 each semester. 1 unit. *W or Th, 1:15-4:05.*

4. MINERALOGY, INCLUDING CRYSTALLOGRAPHY. *Mr. Woodford.* Prerequisite, high school chemistry or equivalent. Two class and two laboratory periods. Laboratory fee \$4.00. 4 units. First semester. Class *WF, 11*; laboratory, *T and F, 1:15-4:05.*

12. ELEMENTARY FIELD GEOLOGY. *Mr. Shelton.* Field methods; geologic mapping; spring recess trip; writing of geologic reports. Prerequisite: Geology 10, completed or in progress. Desirable, Geology 112. Second semester. 6 units. Arranged.

14. FIELD GEOLOGY. *Mr. Shelton.* A summer field course in geologic mapping. 6 units. Prerequisite: Geology 102 and 110.

17a-107b. INVERTEBRATE PALEONTOLOGY. *Mr. Woodford.* Prerequisite, Geology 1 and 2. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$6.00 each semester. 3 units. Arranged.

10. PETROLOGY. *Mr. Woodford.* The study of rocks without the aid of a polarizing microscope. Prerequisite: Geology 1, 2 and 59. Second semester. Two class and two laboratory periods. 4 units. Laboratory fee \$4.00. *WF, 11*, laboratory, *T and F, 1:15-4:05.*

12. STRUCTURAL GEOLOGY. *Mr. Shelton.* Structural features of sedimentary, igneous and metamorphic rocks; deformation of the earth's crust; practice in laboratory methods for dealing with geological problems in three dimensions. Prerequisite: Geology 110. First semester. Two class and one laboratory periods. 3 units. Laboratory fee \$4.00. Arranged.

151a-151b. PETROGRAPHY. *Mr. Shelton*. The optical properties of crystals, study of minerals and rocks with the petrographic microscope. Prerequisite: Geology 110. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$5.00 first semester; \$8.00 second semester. 3 units. Arranged.

161a, 161b. ADVANCED GENERAL GEOLOGY. *Mr. Woodford*. History of geology, weathering, sedimentary rocks, geomorphology, geologic time, mineralogy, ore deposits. Prerequisites: Geology 110, one year of college mathematics, and physics and chemistry of high school or college grade. Three class periods, or two classes and one laboratory each week. 3 units. Arranged.

181, 182. GEOLOGICAL INVESTIGATION AND RESEARCH. *Staff*. 3 units. Laboratory fee \$4.00 each semester. Arranged.

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Graduate work in Geology with special reference to Petrography is offered under the auspices of the Claremont Graduate School.

German

A program of concentration in German consists of a minimum of 18 units in German courses numbered above 100 and 6 additional units in German or in a related field selected according to the student's needs and interests. Special programs for students interested in German Literature, translation, library work, and post graduate work in German can be had from the department.

1a-1b. ELEMENTARY GERMAN. *Mr. Baumann, Miss Wagner*. The acquisition of a small working vocabulary. Constant ear-training, and as much practice in speaking as time permits. Daily exercises in reading and writing. The essentials of grammar. Etymology. Comment on German life. 3 units. *MWF*, 9, 11; *TThS*, 9.

53a-53b. ADVANCED GERMAN. *Mr. Baumann*. More advanced German language study through intensive reading of selected German works, with collateral reading in the field of the student's individual interest—literary, social, or scientific. Continued practice in German conversation. Special attention to an understanding of the cultural life of Germany, Austria, and Switzerland. Prerequisite, German 1 or an equivalent. 3 units. *TThS*.

102a, 102b. ADVANCED CONVERSATION, READINGS AND TRANSLATION. *Mr. Wagner*. Intensive critical readings of masterpieces of the eighteenth and nineteenth centuries. Drill in written and oral expression. This course is also designed for those interested in translating and summarizing in English reports given in German. Prerequisites, German 53 or equivalent. 3 units. *TThS*, 10.

109a, 109b. GERMAN LITERATURE OF THE NINETEENTH CENTURY. *Miss Wagner*. With special reference to the cultural, economic and political history of Germany. Discussion and papers. Prerequisite, German 53 or equivalent. 3 units. *MWF, 10.* (Omitted in 1951-52.)

113a, 113b. GERMAN CLASSICS OF THE EIGHTEENTH CENTURY. *Miss Wagner*. Study of the outstanding works and personalities of the period with particular attention to the social and political life of Germany. Prerequisite, German 53 or equivalent. 3 units. *MWF, 10.*

158a, 158b. MODERN GERMAN LITERATURE. *Mr. Baumann*. The development of German Literature from 1880 to the present with reference to the political and social changes during that period. 3 units. Arranged. (Omitted in 1951-52.)

160a, 160b. SURVEY OF GERMAN LITERATURE. *Mr. Baumann*. The development of German Literature from earliest times to the present. 3 units. Arranged.

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Under the auspices of the Claremont Graduate School graduate work is offered in various phases of German Literature with special emphasis on the modern field.

Government

In addition to preparation for more effective citizenship, concentration in Government is suggested for students planning careers in law, teaching, research, public relations, civil service or the foreign service. The department will gladly advise students regarding opportunities in these fields and will assist in developing programs of study designed to meet basic requirements.

General Requirement: Government 51, or its equivalent, is a prerequisite for all other courses in the Department.

Lower Division Prerequisites for Concentration: The following courses must be completed by the end of Sophomore year: History 1; Government 51; Economics 51. The introductory courses in Sociology, Accounting and Statistics are strongly recommended.

Program of Concentration: A minimum of 24 upper division units in Government, including in each case Government 104, 125, 154, 157, 182, 183, and 6 upper division units from one of these fields: Economics, History, Sociology. These combinations are especially recommended: in Economics 183 and 109 or 104 and 110; in History 107a, b, 113a, b; Sociology 102 and 181. Each student's program shall be arranged in consultation with the departmental staff. A reading and speaking knowledge of at least one modern foreign language is strongly advised, particularly for students having any intention whatever of seeking positions in foreign service or foreign trade.

Junior Transfers: Students transferring to Pomona at the beginning the Junior year are eligible to concentrate in Government, provided prerequisites are met before entrance or can be met during the Junior year.

Three Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three year program enabling them to earn both the B.A. and M.A. degrees. In addition, the Claremont Summer Session, sponsored jointly by the Claremont Associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them to complete within the three year period, also to obtain certificates for teaching in high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

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COMBINED INTRODUCTORY COURSE IN ECONOMICS AND GOVERNMENT

For the benefit of a limited number of students unable to include in their programs a full year each of economics and government, these two Departments cooperate in offering the combined course described below. It may be offered in fulfillment of one of the requirements for distribution in the liberal arts division but not in combination with either Economics 51 or Government 10 which are the recommended courses. The two halves of the course may be taken in either order or concurrently. Credit will not be given for the completion of only one half of the course.

Economics 1a. AMERICAN ECONOMIC SYSTEM. *Staff.* A study of fundamental economic institutions, problems and processes, special attention being given to factors which determine national income, employment and production. (Substantially equivalent to Economics 51a.) 3 units. First semester. *TThS, 8, 10.* Second semester. *TThS, 8.*

Government 1b. AMERICAN POLITICAL SYSTEM. *Staff.* A study of basic political institutions, problems and processes, with emphasis on the Constitution, democracy, federalism, and the functions of legislation and administration. (Substantially equivalent to Government 51b.) 3 units. Second semester. *TThS, 10.*

GOVERNMENT

51a-51b. ESSENTIALS OF GOVERNMENT. *Staff.* The foundation course in government, embracing in the first half a survey of principles, processes and institutions of universal significance in politics and, in the second, a study of the United States Government based on the conceptual insights thus developed. Required of all students concentrating in government or international relations. 3 units. *MWF, 8, 10; TThS, 10.*

01. AMERICAN POLITICAL IDEAS. *Mr. Lee.* The growth of political and legal ideas in America from colonial times to the present, with emphasis upon theories regarding the foundations, structure, and scope of government. 3 units. Second semester. *MWF*, 8.
03. STATE AND LOCAL GOVERNMENT. *Mr. Vieg.* An examination of trends and problems, both political and administrative, in state and local government, with particular reference to California. Special attention given to needs of students interested in education and municipal management. 3 units. First semester. *MWF*, 2:15. (Omitted in 1951-52.)
04. PRINCIPLES OF ADMINISTRATION. *Mr. Vieg.* A study of the forms and modes of responsible administration in American government including the theory and practice of organization, fiscal and personnel management, measurement of administrative efficiency, public relations and comparisons with business management. 3 units. Second semester. *MWF*, 9.
05. INTRODUCTION TO LAW. *Mr. Lee.* The nature of law, public and private; theories of jurisprudence; comparative legal institutions with emphasis upon Anglo-American common law and equity; the citizen's legal rights and liabilities; judicial systems. 3 units. First semester. *TThS*, 8.
06. BUSINESS LAW. *Mr. Darby.* A survey of the law of contracts, agency, sales, negotiable instruments and other matters normally arising in the course of business. 3 units. Second semester. *TThS*, 8.
10. PROBLEMS IN ADMINISTRATION. *Mr. Vieg.* Intensive study of selected problems in local, state, national or international administration. An advanced course designed primarily for students preparing for government service or for graduate work in public administration. 3 units. (Omitted in 1951-52.)
25. MODERN DEMOCRACIES. *Mr. Lee.* A comparative study of political institutions in contemporary democratic states, including Great Britain, Canada, France, Switzerland, and one of the Scandinavian countries. 3 units. First semester. *TThS*, 10.
36. SOVIET IDEOLOGY AND INSTITUTIONS. *Mr. Vieg.* An analysis of the assumptions, institutions and processes of Soviet life and a study of the evolution of Soviet politics, economics, and diplomacy from 1917 to the present. 3 units. Second semester. *TThS*, 10.
44. AMERICAN CONSTITUTIONAL LAW. *Mr. Darby.* An analytical and historical examination of the nature and extent of constitutional power in the United States. The separation of powers doctrine; federal-state relations; the powers of Congress and the President; constitutional guarantees of the rights of individuals; suffrage, citizenship, and the civil liberties—religion, speech and press. Principal emphasis will be placed on Supreme Court cases. 3 units. First semester. *MWF*, 8.

156. ADMINISTRATIVE LAW. *Mr. Darby.* The law of public power in the United States; the character and limits of executive-administrative authority; the extent and significance of administrative adjudication, principally with reference to independent regulatory commissions; the Administrative Procedure Acts. 3 units. Second semester. *TThS*, 9. (Omitted in 1951-52.)

157. PARTIES AND PRESSURE GROUPS. *Mr. Vieg.* A study of the role of parties and pressure groups in democratic government, the nature of the American party-lobby system, party platforms and leaders, tactics of pressure groups and the problem of civic indifference. 3 units. First semester. *MWF*, 9.

160. PUBLIC OPINION AND PROPAGANDA. The role of individual and group opinion in the modern state and world community, with particular consideration of propaganda and other pressure techniques developed to influence the opinion. Contemporary problems will be emphasized. 3 units. Second semester. (Omitted in 1951-52.)

161, 162. READINGS AND RESEARCH IN GOVERNMENT. *Staff.* Reading program for students capable of independent study in fields of special interest not included within the scope of regular courses including, when opportunity offers, research in nearby governmental agencies. Each program must be approved in advance by some member of the Departmental staff. 2 or 3 units. Arranged.

165. AMERICAN FOREIGN POLICY. *Mr. Darby.* A study of the development of American foreign policy and the relationship it bears to domestic politics. General and regional policies are studied. 3 units. First semester. *TThS*,

167. INTERNATIONAL POLITICS AND ORGANIZATION. *Mr. Darby.* An examination of selected geographical, economic, political and juridical problems bearing upon relations within the family of nations and the maintenance of international peace and security; organization and operations of the United Nations and its specialized agencies; diplomatic procedures, alliances, the balance of power. 3 units. Second semester. *TThS*, 9.

182. HISTORY OF POLITICAL THOUGHT. *Mr. Jones.* A study of the major political philosophers in Western civilization from Plato to and including Bentham. 3 units. First semester. *MWF*, 11.

183. PHILOSOPHY AND SCIENCE OF GOVERNMENT. *Mr. Lee and Mr. Vieg.* A survey of recent political theory, a review of politics, administration and law and an analysis of scientific method in social study. 3 units. Second semester. *MFW*, 11.

Honors Study

Students of marked capacity are invited to arrange with the Department for enrollment in programs of independent study culminating in the presentation of a dissertation on some subject of special interest and significance. One ha

the minimum requirement of 12 units may be met by Government 182 and 183 which together constitute the Senior seminar.

STATISTICS FOR SOCIAL SCIENTISTS. For description see Economics 57.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ADMINISTRATIVE ORGANIZATION IN BUSINESS AND GOVERNMENT. *Mr. Benson.* 3 units. First semester.

PERSONNEL ADMINISTRATION. *Mr. Phelps.* 3 units. Second semester.

SEMINARS OFFERED BY DEPARTMENTAL STAFF IN
THE CLAREMONT GRADUATE SCHOOL

2. AMERICAN CONSTITUTIONAL DEVELOPMENT. *Mr. Darby.*

3. POLITICS AND LEGISLATION. *Mr. Vieg.*

For other seminars open to qualified seniors consult the catalog of The Claremont Graduate School and confer with the Department.

History

General requirement: History 1, or its equivalent, is a prerequisite for all other courses in history.

Concentration requirements: Students planning to concentrate in History are required to take History 1, 55, 140 and 190, as well as one semester of a proseminar in History. They should also take Political Economy 1, or Government 51 and Economics 51 during the Freshman and Sophomore years. During Junior and Senior years, in addition to History 140, History 190, and a proseminar, they are required to take at least 12 additional units of upper division courses in History, and at least 6 units of upper division courses in related field such as Economics, Government, Sociology, Religion, Literature, Philosophy. The courses in any program of concentration should be carefully integrated, and should be planned in consultation with a member of the History Department. All concentrators in History will write three examinations of a comprehensive nature near the end of Senior year. One of these will be the same for all concentrators in History, and will deal with the field as a whole, its point of view and method. In addition, each concentrator will select two from the following subjects in which to be examined: Ancient History; Europe, 312—1648; Europe since 1648; the United States; Latin America; the Far East.

Honors requirements: A student admitted to Honors Study in the Social Sciences with History as his major field will, in addition to the program of reading and conferences arranged with the member of the department who acts as his adviser, participate in a seminar including the departmental faculty and students in Honors, which will meet for the presentation of reports and

discussion. Juniors will register for 141; Seniors will register for 191. Honors thesis is required of all students in this program, and, near the end Senior year, there will be a series of written comprehensive examinations the major and minor fields as well as an oral examination.

1a-1b. THE DEVELOPMENT OF WESTERN CIVILIZATION. *The Department Staff*. The evolution of civilization in Europe from antiquity to the contemporary scene, and its spread throughout the world. Attention is paid to the political, religious, intellectual, and economic forces of change. The aim is to lay a foundation for the understanding of contemporary problems and units. *MWF, 8, 9; TThS, 9.*

55a, 55b. HISTORY OF THE UNITED STATES. *Mr. Kemble*. The political, economic, and cultural development of the United States from its beginning as an outpost of European expansion to a position of independence and world influence. 3 units. *MWF, 11.*

101. HISTORY OF GREECE. *Mr. Carroll*. A survey of ancient Greece from prehistoric age until the Roman conquest, with special emphasis on the development and decay of the city-state and of Athenian democracy. The social, economic, and intellectual history of the period will be considered within the political frame of reference. 3 units. First semester. *MWF, 10.*

102. HISTORY OF ROME. *Mr. Carroll*. A study of Rome from the beginning of the city to the disappearance of the Empire. There will be special attention to the problems of imperial administration, the causes of the decline of the Empire, and the emergence of Christianity. 3 units. Second semester. *MWF, 10.*

103a, 103b. HISTORY OF THE MIDDLE AGES. *Mr. Learnihan*. History of Europe from Constantine to Charles V, with special emphasis on the economic, political, intellectual, and religious developments and the institutions and ideals underlying the transition from Mediterranean to European civilization. The first semester covers the period 312-1054; the second semester 1054-1517. 3 units. (Offered in alternate years; omitted in 1951-52.) *MWF, 9.*

107a, 107b. HISTORY OF ENGLAND. *Mr. Gleason*. The development of the main features of civilization in the British Isles. Emphasis is laid upon the evolution of religious, intellectual, and economic forms as well as the growth of political institutions. Thus the course is largely a study of the cultural heritage of America. First semester, Great Britain to 1688. Second semester, Great Britain since 1688. 3 units. *MWF, 11.*

113a, 113b. EUROPE SINCE 1870. *Mr. Meyer*. Political, economic, social, and intellectual developments will be studied with reference both to their intrinsic significance and to an understanding of contemporary Europe. Open to Sophomores who satisfy the instructor with regard to their preparation. 3 units. *MWF, 10.*

14. HISTORY OF RUSSIA. *Mr. Meyer*. A survey of Russian political, economic, and cultural history to 1917. This course may be followed by Government 16 to constitute a year's work in Russian History. 3 units. First semester. Offered in alternate years; omitted in 1951-52.) *TThS*, 10.

15. MIDDLE EUROPE, 1815-1914. *Mr. Meyer*. A survey of developments in the zone of conflict between the western European nations and Russia. Emphasis will be placed upon the growth of German and Slavic nationalism, the birth and progress of the Second German Empire, and the decay of the Habsburg Monarchy. 3 units. (Omitted in 1951-52.)

17a, 117b. INTELLECTUAL HISTORY OF EUROPE. *Mr. Learnihan*. A study of the formation of the ideas and ideals significant in politics, religion, and science since classical times, their expression in literature and institutions, and their influence on the development of society. (Offered in alternate years; to be omitted in 1952-53.) *MWF*, 9.

10. THE WESTWARD MOVEMENT IN NORTH AMERICA. *Mr. Kemble*. A study of the migration of people, institutions, and ideas across the continent, from the establishment of the English colonies to the twentieth century. Some attention will be given to the parallel and overlapping movement of population in Canada. 3 units. Second semester. (Offered in alternate years; omitted in 1951-52.) *MWF*, 8.

13a, 123b. THE TEN REPUBLICS OF SOUTH AMERICA. *Mr. Herring*. The development of these republics since independence; some attention to their Indian and colonial backgrounds. Open to Juniors and Seniors. 3 units. Offered in alternate years; omitted in 1951-52.)

14a, 124b. MEXICO, CENTRAL AMERICA AND THE CARIBBEAN REPUBLICS. *Mr. Herring*. The development of the ten republics of "Middle America"; their Indian and colonial backgrounds; their history since independence; with some attention to the colonies of the United States and of European powers within the Caribbean area. Open to Juniors and Seniors. 3 units. (Offered in alternate years; to be omitted in 1952-53.) *W*, 7:30-9:45 p.m.

15a, 125b. STUDIES IN THE HISTORY OF MEXICO, CENTRAL AMERICA, AND THE CARIBBEAN REPUBLICS. *Mr. Herring*. Designed to supplement History 14a, 124b. Open only to students who are taking that course and upon permission of the instructor. 1 unit. *W*, 5-6.

10. MODERN MARITIME AND NAVAL HISTORY. *Mr. Kemble*. A study of the development of sea power and commerce from the sixteenth century to the present. The growth and character of the great mercantile marines, the evolution of naval architecture, and the course and character of war at sea will be considered. 3 units. First semester. (Offered in alternate years; to be omitted in 1952-53.) *MWF*, 10.

10. THE STUDY OF HISTORY. *Mr. Learnihan*. An introduction to the mature study of history. Topics to be considered will include: the philosophy of

history, schools of historical writing, historical bibliography, the technique of historical investigation, evidence and its interpretation. The course designed and required for concentrators in history in the first term of Junior year, but other Junior and Senior students may be admitted with the permission of the instructor. 3 units. First semester. *TTh*, 2:15-3:45.

141a, 141b. HISTORY AND HISTORIANS. *The Departmental Staff*. A consideration of the theory and interpretation of History through the reading of a selected group of great historical classics, and a study of the development of historiography. Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T*, 7:30-9:30 p.

190. HISTORICAL PROBLEMS AND INTERPRETATION. *Mr. Meyer*. Readings and discussion of important aspects of European and American history. Consideration of major historical developments and some of the most significant works dealing with the several fields of History. The course is designed and required for Seniors concentrating in History. Other Seniors may be admitted with the permission of the instructor. 3 units. Second semester. *TTh*, 2:15-3:45 arranged.

191a, 191b. SELECTED TOPICS FOR HISTORICAL INVESTIGATION. *The Departmental Staff*. Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T*, 7:30-9:30 p.

PRO-SEMINARS

The following courses are designed primarily for concentrators in history. Other students will be admitted with the permission of the instructor. It is intended to offer at least one pro-seminar in European and one in United States history each year, but the subjects studied may vary from time to time. Similar instruction in the history of Latin America and the Far East is available for Pomona Seniors in the offerings of Claremont Graduate School.

162. HISTORY OF THE RENAISSANCE AND REFORMATION. *Mr. Gleason*. Analysis of the transition from Medieval to Modern Civilization. Intellectual, social, economic, and particularly religious developments will be studied from their early manifestations in fourteenth century Italy to their culmination in northwestern Europe in the seventeenth century. 3 units. Second semester (Offered in alternate years; to be omitted in 1952-53.) *MW*, 2:15-3:45 arranged.

168. CONTEMPORARY MIDDLE EUROPE. *Mr. Meyer*. The effects of the two world wars upon mid-European society, and the struggle for supremacy between democracy, fascism, and communism. Prerequisite: History 113a, 3 units. First semester. (Offered in alternate years; to be omitted in 1952-53.) *TThS*, 10.

170. HISTORY OF WESTERN AMERICA. *Mr. Kemble*. The exploration, economic exploitation, and settlement of Western North America by Spaniards, R

ians, and Anglo-Americans. Attention is given to the evolution of political, cultural, and economic institutions, and the opening of routes of communication. Lectures and directed research in the splendid materials contained in the Henry R. Wagner Collection of History and Cartography of the North Pacific and the Mason Library of California and Western American History. 3 units. Second semester. (Offered in alternate years; to be omitted in 1952-53.) *MW*, 2:15 and arranged.

72. AMERICAN CIVILIZATION, 1763-1828. *Mr. Kemble*. A study of significant aspects of American political, economic, and intellectual history between the closing years of the Colonial Period and the Age of Jackson. 3 units. First semester. (Offered in alternate years; omitted in 1951-52.) *MW*, 2:15 and arranged.

HISTORY OF CHINA. For description see Oriental Affairs 103a, 103b.

JAPANESE HISTORY AND CULTURE. For description see Oriental Affairs 111.

AVAILABLE AT SCRIPPS COLLEGE

I-100. ECONOMIC CHANGE IN THE UNITED STATES. *Mr. Britt*. Second semester. *TThS*, 10.

-114. PROGRESS AND MEANING OF THE SCIENCES. *Miss Smith*. Year course. Arranged hours.

SENIOR HUMANITIES. *Staff*. Discussion of the contemporary American scene. Year course. *MWF*, 9.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

These offerings are designed primarily for graduate students, but are open to qualified Seniors by permission of the chairman of the department and the instructor.

21. STUDIES IN EUROPE SINCE 1914. *Mr. Cooke*. Second semester. 5 units. *Th*, 4-6 and 7:30-9:30 p.m.

29. AMERICAN DIPLOMATIC HISTORY. *Mr. Cooke*. First semester. 5 units. *Th*, 4-6 and 7:30-9:30 p.m.

27a, 227b. THE UNITED STATES IN THE 19TH CENTURY. *Mr. Bradley*. 5 units. *Th*, 8-10 p.m.

24a, 254b. THE COLONIAL PERIOD OF LATIN AMERICA. *Mr. Herring*. 3 units. (omitted in 1951-52.)

27a, 257b. THE RELATIONS OF THE UNITED STATES WITH LATIN AMERICA. *Mr. Herring*. 3 units. *Th*, 7:30-9:45 p.m.

Mathematics

Requirements for concentration: In addition to the basic courses of Mathematics 1a, b or 52a, and 65a, b, it is necessary to take the following courses: Mathematics 118, 119, 125, 151a, b, and at least three more upper division graduate units in the department of Mathematics*. The remaining six units may be taken in Mathematics* or selected from Physics 113a-b, 191a, Astronomy 155.

Mathematics 1a, b is normally prerequisite for all other work in the department. Students who have had trigonometry in high school may take examination in mathematics on the Saturday preceding registration. If satisfactory grade is made on this examination, the student may enroll in Mathematics 52a if he so desires.

1a, 1b. INTRODUCTION TO COLLEGE MATHEMATICS. *Departmental Staff*. While this course prepares students for work in the calculus, it is at the same time comprehensive enough to provide in itself a general mathematical background. It is designed for students who have not had trigonometry, but is open to students who do not wish or are not able to qualify for the alternative described above. It includes college algebra, trigonometry, and an introduction to analytic geometry and calculus. 3 units. *MWF, 10; MWF, 11; TThS, 8*

25. TRIGONOMETRY. *Mr. Jaeger*. This course is designed especially for students planning to enter branches of the armed forces using trigonometry in its applications. Credit may not be had for both this course and Mathematics 1. 2 units. First semester. *WF, 8*.

52a, 52b. PLANE AND SOLID ANALYTIC GEOMETRY. *Mr. Tolsted*. A study of the straight line, conic sections, higher plane curves, various coordinate systems. In the second semester a study will be made of planes, curved surfaces, space curves and solution of spherical triangles. Prerequisite to 52b is either Mathematics 1 or Mathematics 52a. Credit will not be given for both Mathematics 1 and 52a. 3 units. *MWF, 10*.

65a, 65b. DIFFERENTIAL AND INTEGRAL CALCULUS. *Staff*. This is a standard course in the theory and application of the calculus. 3 units. *MWF, 9; TThS*

118. HIGHER ALGEBRA. *Mr. Jaeger*. Permutations, combinations, probability, binomial and multinomial theorems, summation of series, and other algebraic topics. 3 units. First semester. *TThS, 9*.

119. THEORY OF EQUATIONS. *Mr. Jaeger*. The theory and solution of algebraic and transcendental equations; determinants and matrices. 3 units. Second semester. *TThS, 9*.

*Mathematics 228 may not be offered in fulfillment of requirements for concentration.

5. INTERMEDIATE CALCULUS. *Mr. Tolsted*. Topics not taken up in Mathematics 65, with special emphasis on multiple integrals, partial differentiation, and series with applications of each of these. 3 units. Second semester. *WFF*, 9.

12a, 151b. DIFFERENTIAL EQUATIONS. *Mr. Hamilton*. A general course in the theory, solution, and application of differential equations. 3 units. *MWF*, 8.

12a, 152b. ADVANCED CALCULUS. *Mr. Tolsted*. Limits, sequences, continuity, improper integrals, uniform convergences, Taylor and Fourier series, partial derivatives, multiple integrals. 3 units. *TThS*, 10.

10. PROJECTIVE GEOMETRY. *Mr. Tolsted*. Analytical treatment of linear dependence; projective, metric, and affine transformation; and projective theory of conics. 3 units. First semester. (Omitted in 1951-52.)

15. VECTOR ANALYSIS. *Mr. Hamilton*. Algebra and calculus of vectors; divergence and Stokes' theorems. 3 units. First semester. *MWF*, 11.

14. MATHEMATICAL STATISTICS. *Mr. Hamilton*. The mathematical basis for statistical theories and methods with applications from various fields. Prerequisite, Mathematics 65a, b. 3 units. Second semester. *MWF*, 11.

15. ACTUARIAL MATHEMATICS. *Mr. Jaeger*. Finite differences, interpolation formulas, approximations, summations, probability. 3 units. Arranged.

13a, 198b. SELECTED TOPICS IN HIGHER MATHEMATICS. *Staff*. Special work or reading not included in the preceding will be offered in this course. 3 units. Arranged.

MATHEMATICAL PHYSICS. For description see Physics 191a-191b.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

The following courses, listed among the offerings of the Claremont Graduate School, are open to superior undergraduates who have satisfied the prerequisites.

20a, 200b. NUMBER THEORY. *Miss Walton*. Properties of integers, linear and quadratic congruences, and algebraic numbers. Prerequisite Mathematics 65. 3 units. *MWF*, 10.

25a, 205b. DIFFERENTIAL GEOMETRY. *Mr. Tolsted*. The study of curves and surfaces in three dimensional Euclidean space, introducing the tensor calculus (the principal mathematical tool in the study of the theory of relativity). Prerequisites Mathematics 52b or equivalent and Mathematics 152. 3 units. Arranged.

22a, 210b. COMPLEX VARIABLE. *Mr. Hamilton*. Algebra and calculus of complex variables; infinite series; Cauchy's Theorem and consequences, including Taylor and Laurent expansions and classification of singularities;

entire functions; meromorphic functions. Prerequisite, Mathematics units. Arranged.

215a, 215b. REAL VARIABLE. *Mr. Tolsted*. Fundamentals of the theory of functions of a real variable. Introducing abstract spaces, measure theory, Lebesgue integration. Prerequisite, Mathematics 152. 3 units. (Omitted 1951-52.)

228. THE TEACHING OF MATHEMATICS is offered during the Claremont summer session.

PRE-ENGINEERING

In the following courses three hours of work per week are required for one unit. It is necessary that the student attend class on the hour agreed upon for the lecture, but it is not mandatory that the laboratory work be done in one or two periods. Credit will not be given for only 1 unit of work.

The letters a, b, c, d, refer to units of work, each letter being associated with one unit. All units are available each semester. A student may enroll in any unit for which he is qualified.

7a, 7b, 7c, 7d. ENGINEERING DRAWING. *Mr. Burnham*. A beginning course in mechanical drawing and applied geometry. Includes lettering, orthographic projection, visualization of simple objects, and making working drawings of machine assemblies. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

40a, 40b, 40c, 40d. DESCRIPTIVE GEOMETRY. *Mr. Burnham*. Prerequisite: Engineering Drawing 7a and 7b, or previous drawing experience. Theoretical principles of projection including points, lines, planes, shades and shadows, plane sections and development of surfaces, and intersections of surfaces. Practical problems from the student's chosen field will be given toward the end of 40d. 1 or 2 units per semester. For a well rounded course 40a should be taken immediately after Engineering Drawing 7. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

101a, 101b, 101c, 101d. ARCHITECTURE. *Mr. Burnham*. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, and sufficient knowledge of physics so that the student is at least conversant with the subjects of mechanics, heat, electricity, and light. Basic work in architectural design including construction of construction details, materials, wiring, lighting, plumbing, and heating. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged. (Omitted in 1951-52.)

102a, 102b, 102c, 102d. MECHANISMS. *Mr. Burnham*. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, Physics 51a. Practice in the graphical solution of structures, gears, cams, and machine mechanisms, using the principles of statics and kinematics. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

a, 103b, 103c, 103d. TOPOGRAPHICAL DRAFTING. *Mr. Burnham*. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b. Practice in the making of topographical maps and the construction of models. 1 or 2 units per semester. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged.

a, 104b, 104c, 104d. PRODUCTION ILLUSTRATION. *Mr. Burnham*. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, 40c, 40d. Practice in the making of isometric, oblique, and diametric sketches and drawings including the use of special instruments. 1 or 2 units per semester. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged. (Omitted in 1951-52.)

a, 105b, 105c, 105d. DESIGN OF MACHINE ELEMENTS. *Mr. Burnham*. Prerequisite: Engineering Drawing 102a, 102b, 102c, 102d. The design of machine elements from the student's chosen field. 2 units per semester. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged. (Omitted in 1951-52.)

AVAILABLE AT CLAREMONT SUMMER SESSION

SURVEYING. *Mr. Jaeger*. 3 units. Offered in Claremont Summer Session.

Military Science

The College maintains an Infantry Unit, Senior Division, of the Reserve Officers' Training Corps, established under the National Defense Act for the purpose of training students to become officers of the Army of the United States. During the past year the emphasis of this training has been changed so that the ROTC now constitutes the principal source of procurement of junior officers for the Regular Army with the general purpose of providing officers for the Officers' Reserve Corps and National Guard. Those students who successfully complete the four year course will be tendered commissions as second lieutenants of Infantry in the Organized Reserve Corps, while those of outstanding proficiency will be offered a similar opportunity in the Regular Army.

The courses include both classroom and out-of-doors instruction. Instruction in military theory has been greatly expanded since World War II and covers the basic technical knowledge required of a lieutenant in the United States Army. One drill period a week provides a limited opportunity for the practical application of command and assists in the improvement of the posture and physical coordination of the student. Special emphasis is placed on the development of the qualities of leadership throughout the course. The poise required by the student and his experience in the art of command may be gained in any walk of life.

The instructors in the department are officers of the regular army detailed to duty at the college by the Department of the Army. The most modern weapons, equipment and types of instructional material are furnished to give students practical experience in handling such equipment.

The four year course is divided into the basic course which consists of MS I and MS II (each requiring two terms) and the advanced course which consists of MS III, MS IV (each requiring two terms) and one summer training course of six weeks duration. Enrollment in the basic or advanced course is voluntary. However, when a student has elected either course the completion of the second year of that course becomes a prerequisite for graduation.

The basic course is open to all physically fit male students who are American citizens. Enrollment does not interfere with the participation in sports by the students nor in other activities of the college. Uniforms and books for these courses are issued to the students without charge.

Military service during World War II furnishes a basis for credit for course instruction according to the individual's length of service, type of training, and honorable discharge from the military or naval service of the United States. Credit is also allowed for prior Senior or Junior ROTC training. Application for advanced standing must be made during registration. Discharges from the military or naval service or certificates showing successful completion of ROTC courses at other schools should be presented at that time.

Enrollment in the advanced course (MS III and IV) is limited to selected members who have completed the basic course, or have received equivalent credit because of military or naval service, and who enter into an agreement to attend one summer training camp. In consideration of this agreement students receive cash allowances from the government equivalent to a scholarship of about \$310.00 a year. All necessary expenses in connection with the training camp, including transportation to and from camp, food, housing, pay, uniform and medical attention are provided by the government.

Quotas for draft deferment in the past have been sufficient to grant deferment to all enrolled ROTC students. A student enrolled in ROTC should anticipate, therefore, that he will not have his college work interrupted by being drafted for military service.

Graduating students who have maintained a high standing in military subjects may be designated by the Professor of Military Science and Tactics as "Distinguished Military Students" because of their demonstrated leadership aptitude and academic proficiency. The Senior ROTC will provide the principal source of procurement of junior officers for the Regular Army through the selection of distinguished military graduates of the Senior ROTC Units for direct Regular Army appointment without further mental examination. Through voluntary extended active duty-tours other graduates will be selected for appointment as officers of the regular army.

1A-1b. MILITARY SCIENCE COURSE I. *Staff*. Military Organization; Military Policy of U. S., National Defense Act and ROTC; Evolution of War Maps and Aerial Photographs; Weapons and Marksmanship; First Aid Hygiene; Military Problems of the U. S.; and Leadership, Drill, and Exercise of Command, 2½ units. Class, *TTh*, 8, 9, or 10; *M*, 1:15-2:05.

53A-53b. MILITARY SCIENCE COURSE II. *Staff*. Introduction to Branch Tactics; Leadership, Drill and Exercise of Command. 2½ units. Class *TTh*, 8, 9, or 10; *M*, 1:15-2:05.

1-105b. MILITARY SCIENCE COURSE III. *Staff*. Branch Tactics and Technique (Infantry); Leadership, Drill and Exercise of Command. 4 units. Class *WF*, 8 or 9; *M*, 1:15 and *F*, 11 or 1:15.

MILITARY SCIENCE ROTC SUMMER CAMP. *Staff*. Military sanitation; tactical warfare; safeguarding military information; drills and parades; weapons and marksmanship; information and education; interior guard duty; camp management; physical training and athletic; marches and bivouacs; tactics and technique. 3 units. Six weeks in June and July at camp designated by army commander.

1-157b. MILITARY SCIENCE COURSE IV. *Staff*. Military Administration; Military Law and Boards; Military Teaching Methods; Psychological Warfare; Branch Tactics and Technique (Infantry), Geographical Foundations of National Powers; Leadership, Drill and Exercise of Command. 4 units. Class *MWF*, 8 or 9; *M*, 1:15 and *F*, 11 or 1:15.

Advanced students in Military Science are required to attend a summer camp in which 3 units of credit are allowed toward graduation.

Music

Recognizing a dual function in its educational approach, the Music Department endeavors to meet the needs of both the general and the pre-professional student. It offers to the first type a wide selection of both participating and non-participating courses, in order to aid him in giving music a place of importance in his future cultural life and experience. To the second type, who enter the music profession as teachers and performers, the music concentration program affords a thorough and broad pre-professional training, leading to graduate study.

Requirements for concentration: The following courses are required of all students concentrating in music: Music 1, 2, 55, 56, 104, 107, 159, and 195. Students entering as upperclassmen should take the Lower Division courses (under 100) before coming to Pomona. In addition to the above, a student must take the following courses, according to his particular field of music concentration: in Composition, Music 113 and 158; in History, two of the following: Music 103, 160 and 163, and, in certain cases, 130, 131; in Applied Music, Music 11, 61, 111, 161.

Comprehensive Examinations. All students concentrating in music must take a comprehensive examination based upon Music 104, 107, and 159 during the senior year. For those whose field is Composition such examination will also include Music 113 and 158. Those concentrating in History will include two of the following: Music 103, 160 and 163. (For comprehensive examinations in Applied Music refer to "Examinations in Applied Music.")

THEORY, APPRECIATION AND HISTORY

1a-1b. ELEMENTARY HARMONY. *Mr. Loucks, Mrs. Briggs.* Thorough grounding in the fundamentals of music through the mediums of hearing, singing, writing, and the keyboard. Study of major and minor modes; all diatonic triads, and seventh chords and all non-chordal tones. Harmonic analysis of melodies. Four-part writing based on the techniques of the 17th and 18th centuries. Prerequisite, ability to play a simple hymn at the keyboard. Credit for this course is given only when accompanied by 2a-2b. 3 units. *MW, 9 or 1:15.*

2a-2b. EAR TRAINING AND SIGHT SINGING. *Mrs. Briggs.* Training in melodic, rhythmic and harmonic relationships through singing and dictation. Keyboard practice in simple modulations and cadential combinations. Taken with 1a-1b. 2 hours, 1 unit. *MW, 1:15; TTh, 1:15* or arranged.

53a-53b. INTRODUCTION TO MUSIC. *Mr. Dayton.* Survey of the principal periods in music history from the Renaissance to the present; important composers, trends, forms, and musical aesthetics of each era. Detailed study and analysis of symphony, concerto, opera, chamber music, song and piano literature. A non-technical listening course. No previous musical experience required. 2 units. *MW, 2:15-3:30.*

55a-55b. ADVANCED HARMONY. *Mr. Loucks, Mr. Kohn.* A study of harmonic writing technique as found in the Bach Chorales. Chromatic harmony and modulation. Practice in instrumental styles. Prerequisite, Music 1 and Credit for this course is given only when accompanied by 56a-56b. 3 units. *MWF, 10 or 11.*

56a-56b. ADVANCED EAR TRAINING AND KEYBOARD HARMONY. *Mr. Kohn.* Training in the hearing of progressions involving chromatic chords, leading tones, through harmonic dictation. Keyboard work including modulation and harmonicization of melodies. 2 hours, 1 unit. *MW, 2:15; TTh, 10* or arranged.

103a, 103b. MUSIC IN AMERICAN HISTORY. *Mr. Fiske.* This course is designed to provide the general student with an understanding of the part music has taken in the social and educational growth of the United States, from the colonial period to the present day. Attention will be given to folk, popular and art music and their importance in various phases of our national cultural development. Not limited to music students. 3 units. *TThS, 9.* (Offered in alternate years; to be omitted in 1951-52.)

104a-104b. HISTORY OF MUSIC. *Mr. Fiske.* Intended to familiarize the student with the major trends in the history of music from the early Christian era to the present, with special emphasis on composers, music and developments from the 16th century onward. Considerable attention is given to music problems of the present day. Prerequisite, Music 1 or permission of instructor. 3 units. *TThS, 9.* (Offered in alternate years; to be omitted in 1951-52.)

a-107b. COUNTERPOINT. *Mr. Loucks*. An analytical study of the Palestrina technique. Two and three-voice writing in free style. Original work in the forms of the classical suite, chorale prelude and variations. Prerequisite, Music 3 units. *TThS*, 10.

a-113b. ORCHESTRATION AND INSTRUMENTATION. *Staff*. A study of the instruments of the modern orchestra and band, their technical possibilities and limitations. Practical laboratory work in scoring for instrumental groups. Choral arranging for various voice combinations with and without accompaniment. Opportunity will be provided for public performance of outstanding scores. Fundamentals of conducting will be stressed throughout the course. Prerequisite, Music 55. 3 units. *MWF*, 8.

a-114b. MUSIC IN THE ROMANTIC ERA. *Mr. Dayton*. A study of the romantic spirit of the 19th century as manifested in music. Analysis of characteristic works by Schubert, Schumann, Chopin, Brahms, Berlioz, Liszt, Verdi and Wagner; the rise of musical nationalism. Students electing this course should be able to follow a score. Permission of instructor required. 2 units. First semester. Arranged.

a-115b. CONTEMPORARY MUSIC. *Mr. Dayton*. A study of the philosophies, ideals and objectives of contemporary composers; examination of new idioms, forms, mediums, and technique. Survey and analysis of important works of Debussy, Stravinsky, Schönberg, Hindemith, and other outstanding figures of the 20th century. Students electing this course should be able to follow a score. Permission of instructor required. 2 units. Second semester. Arranged.

a-158b. FREE COMPOSITION. *Mr. Parrish*. Advanced original work in polyphonic and homophonic forms, planned to develop the student's sense of musical structure and his individual manner of musical expression. Prerequisite, Music 107. 3 units. Arranged.

a-159b. FORM AND ANALYSIS. *Mr. Kohn*. Designed to lead to a clear understanding of the principles upon which musical form is based, and to the application of these principles in the works of the great masters of form. Prerequisite, Music 55. 2 units. *TTh*, 8.

a-160b. STUDIES IN RENAISSANCE AND BAROQUE MUSIC. *Mr. Parrish*. Stylistic analysis of the important vocal and instrumental literature from the period of Dufay through the age of Bach and Handel. Prerequisite, Music 107. 3 units. Arranged. (Offered in alternate years; to be omitted in 1951-52.)

a-163b. STUDIES IN THE MUSIC OF THE CLASSICAL PERIOD. *Mr. Parrish*. A survey of the instrumental and vocal compositions of the age of Haydn, Mozart and Beethoven, with detailed analysis of certain of the great and characteristic symphonic, chamber, operatic, choral and keyboard compositions of the period. Prerequisite, Music 104. 3 units. *MW*, 2:15-3:30. (Offered in alternate years; to be given in 1951-52.)

195a-195b. MUSIC SEMINAR. *Mr. Parrish and the departmental staff.* Student in the development of musical style, designed to aid the student in integrating his previous historical, theoretical and interpretative studies into broad concepts of musical evolution. While the areas covered are grouped for convenience into musical literature, theory and performance practices, emphasis is placed on the inter-relationship of all these phases. Required of all senior majors in music. 1 unit. *F, 2:15.*

APPLIED MUSIC

Credit for individual and class work in Applied Music is open to all students in the college, subject to the following provisions: (1) a total of more than 16 units of instruction in Applied Music may be counted toward the Bachelor of Arts degree. Credit of 2 units per semester is given for 1 private lesson weekly, 1 unit per semester for one private lesson weekly. (2) Music 1 and 2 must accompany or precede all credit study. Music 1 and 56 must accompany or precede more than one year of credit study, those taking two lessons weekly.

Those not concentrating in music may obtain additional credit for 1 lesson per week upon completion of Music 1 and 2. Students preparing to concentrate in Applied Music are required to take two lessons per week in their major subject and to appear frequently in recitals.

II. APPLIED MUSIC (Freshman level)

6I. APPLIED MUSIC (Sophomore level)

III. APPLIED MUSIC (Junior level)

16I. APPLIED MUSIC (Senior level)

No credit is given for work in Applied Music taken elsewhere. All private lessons one-half hour in length.

VOICE, *Mrs. Briggs*

ORGAN, *Mr. Blanchard*

PIANO, *Mr. Dayton, and Mr. Kohn*

VIOLIN AND VIOLA, *Mr. Fiske, and Miss Smith*

VIOLONCELLO, *Miss Jean*

WOODWINDS, *Miss Anthony, and Mr. Austin*

BRASS,

Lessons on other instruments may be arranged through the office of the Music Department.

Examinations in Applied Music. Examinations, to be given before the entire Music Faculty, are required of all students in Applied Music, as follows:

Qualifying Examination for Lower Division Credit—to be given, normally, at the beginning of the Freshman year to determine eligibility for credit. No credit is given for elementary study.

Qualifying Examination for Upper Division Credit—to be given, normally, at the end of the Sophomore year to obtain faculty recommendation for concentration in Applied Music. Should a student fail to qualify for such

commendation, he may repeat the examination at the beginning of his senior year. Transfer students will be examined upon entrance.

Students who fail to pass the Qualifying Examination for Upper Division credit but wish additional credit may, by special examination, be allowed a maximum of 4 more units at the Lower Division level.

Senior Comprehensive Examination in Applied Music — all students concentrating in Applied Music will present a satisfactory senior public recital and take the comprehensive Applied Music Examination to be given at the end of the senior year.

Printed information concerning the Qualifying Examinations may be obtained from the Music Department.

GROUP ACTIVITIES

As an important force in the educational life of Pomona College, the Music Department offers opportunity for participation in various instrumental and choral activities on an extra-curricular as well as a credit basis. Not more than two of the following credit-courses may be taken simultaneously. Permission of the instructor is required.

57b. CHORAL SINGING. The study and production of choral music, especially attention being given to diction, phrasing, content of the works dealt with, and an understanding of musicianship as applied to choral singing. The class will be organized as the College Choir and as such will meet on Mondays, Wednesdays and Fridays from 11:55 to 12:20, and on Tuesdays from 11:30 to 12:20. 1 unit. The course may be repeated for credit. Fee to cover cost of music, \$1.50.

58b. ORCHESTRA. *Mr. Fiske*. A study of major works of orchestral repertoire and application of the principles of orchestral routine through music performance. Two periods of attendance weekly. Additional sectional rehearsals at option of director. The course may be repeated for credit. 1 unit. *Fee, 4:15.*

59b. BAND. The study and production of the best in concert band repertoire. Two periods of attendance weekly. The course may be repeated for credit. 1 unit. *MW, 4:15.*

60b. CHAMBER MUSIC. *Mr. Fiske*. A study of important chamber music literature from the 17th century to the present day through performance and analysis. Course also includes historical study of the works performed. Open only to advanced instrumentalists able to participate in performance. Permission of instructor required. The course may be repeated for credit. 2 units. Arranged.

MALE AND WOMEN'S GLEE CLUBS. The Glee Clubs afford opportunity for the study of the finest in both sacred and secular choral music. Frequent public performances are given. Admission by tryout. No credit.

FEES FOR INSTRUCTION AND PRACTICE

<i>For those paying regular tuition:</i>		PER SEMESTER
One-half hour private lesson per week		\$45.00
Each additional half-hour		40.00

<i>For those carrying less than ten hours of college work, exclusive of work in applied music:</i>		
One-half hour private lesson per week		60.00
Each additional half-hour		40.00
Class instruction		25.00

PRACTICE FEES

	PER SEMESTER
Piano, one hour daily	6.00
Bridges Hall Organ (four manuals), one hour weekly	5.00
Two-manual Organ, one hour weekly	2.50
Bridges Auditorium Organ, Claremont College, (advanced students only) one hour weekly	15.00

All students taking courses in Theory (Harmony, Counterpoint, Composition and Orchestration) will be charged the above fee of \$6.00 per semester for use of a piano. Students taking two of these courses will not be charged this fee for the second course, and the fee will not be charged to students who pay a practice fee in connection with their lessons in Applied Music.

AVAILABLE AT SCRIPPS COLLEGE

II-69. NINETEENTH CENTURY MUSIC. *Mr. Pattison*. Year course. TTh, 2:45.

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Graduate work in Theoretical and Applied Music is offered under auspices of the Claremont Graduate School.

Oriental Affairs

A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year's work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 140, 160; Art 117, 153; Philosophy 126.

51a, 51b. THE CULTURAL LEGACIES OF EAST ASIA. *Mr. Ch'en*. A survey of the humanistic achievements of China and India, and their diffusion in the lands in East Asia. A general introduction to East Asian literature, philosophy, religion, and art. 3 units. MWF, 10.

a, 52b. **FIRST YEAR CHINESE.** *Mrs. Soong.* A course for beginners in the Chinese language, with equal emphasis on the analysis of written characters and on actual use of the spoken language. 3 units. *MWF*, 8.

3a, 103b. **HISTORY OF CHINA.** *Mr. Hughes.* General survey of Chinese history, with emphasis on such topics as the rise of philosophical schools, important movements in literature and art, and the evolution of social and political institutions. An effort will be made to interpret the complexities of the problem of present day China in the light of her ancient cultural heritage. 3 units. *MWF*, 9. (Omitted in 1951-52.)

4. **CHINESE LITERATURE IN TRANSLATION.** *Mrs. Soong.* A study of outstanding Chinese literary works in English translation with the aim of a deeper appreciation of Oriental life and thought. 3 units. Second semester. *MWF* 9.

5. **THE CONTEMPORARY FAR EAST.** *Mr. Ch'en.* The impact of Occidental cultures and peoples upon Eastern Asia, including India and Malaysia; the physical, intellectual, and moral resources of Oriental nations; the post-war problems of these countries today. 3 units. First semester. *T*, 7-9:30 *p.m.*

6. **JAPANESE HISTORY AND CULTURE.** The evolution of Japanese social, economic, and political institutions since prehistoric times. Geographical foundations and the development of Japanese philosophy, literature, and the arts will receive some stress. About one-third of the course will deal with Japan since 1603. 3 units. First semester. (Omitted in 1951-52.)

7. **EASTERN ASIA IN THE NINETEENTH CENTURY.** *Mr. Hughes.* A consideration of the traditional patterns of life and institutions in China under the Manchus, in Tokugawa Japan, and to a lesser extent under the old regimes in Korea, Siberia, and Southeastern Asia prefaces a study of the impact of Western imperialism and civilization upon those countries. Domestic developments receive slightly more emphasis than foreign relations. 3 units. First semester. *MWF*, 11.

8. **EASTERN ASIA IN THE TWENTIETH CENTURY.** *Mr. Hughes.* Cultural and political revolutions which began or have been accentuated since the turn of the last century and which still are in progress will be studied. Special attention is devoted to the implications of such forces as nationalism and imperialism, democracy and totalitarianism, capitalism and communism, science and industrialism, operating as the Far East evolves new modes of thought, organization and behavior. It is suggested but not required that this course be preceded by Oriental Affairs 123. 3 units. *MWF*, 11.

9. **HISTORY OF CULTURAL RELATIONS BETWEEN CHINA AND THE OCCIDENT.** *Mr. Ch'en.* A rapid survey of the religious, intellectual, literary and artistic relations and interchanges between China and the Western World from Pre-Roman times to the middle of the nineteenth century. 3 units. Second semester. *T*, 7-9:30 *p.m.*

151a, 151b. SECOND YEAR CHINESE. *Mrs. Soong*. An intermediate course open to those who have had 52a, 52b. 3 units. *MWF, 2:15*.

160. HISTORY OF FAR EASTERN DIPLOMACY. Some attention to European relations with Malaysia and Indonesia, and to the period 1500-1800; major emphasis on diplomatic relations of the Western Powers and Russia with China, Japan, Korea, and the Philippines since 1800. 3 units. First semester. (Omitted in 1951-52.)

181a, 181b. THIRD YEAR CHINESE. *Mrs. Soong*. A continuation of 151a, 151b with exercises in reading classical (Wenli) Chinese prose and poetry. 3 units. Arranged.

195. READINGS IN ORIENTAL AFFAIRS. *Staff*. 2 or 3 units. Each semester. May be repeated for credit. Arranged.

ORIENTAL PHILOSOPHY. For description see Philosophy 126.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

222a, 222b. STUDIES IN THE HISTORY OF CHINESE THOUGHT. *Mr. Huguang*. Arranged.

261. PROBLEMS IN CHINESE HISTORY *Mr. Ch'en*. Each semester. Arranged.

Philosophy

Courses 55 and 57 are general introductions to philosophy. They are recommended for students who wish a general acquaintance with the subject. Either satisfies the distribution requirement.

Concentration: Students planning to concentrate in philosophy must take Philosophy 55 and twenty-four hours of upper division work. Eight of these must be in the field of philosophy, but six hours of work may be chosen from other departments if the selection is approved by the student adviser. An introductory course in psychology is recommended.

Students transferring to Pomona at the beginning of the Junior year eligible to concentrate in philosophy provided the lower division prerequisites are met before entrance or can be met during the Junior year. Information concerning the Honors program in philosophy may be obtained from the Department. Those intending to do graduate work in philosophy should have a reading knowledge of French and German.

51. INTRODUCTION TO LOGIC. *Mr. Iredell*. A study of the elements of deductive and inductive reasoning with special emphasis upon the nature and use

scientific hypotheses, probability, and deductive and inductive fallacies. 3 units. (Omitted in 1951-52.)

a, 55b. HISTORY OF EUROPEAN PHILOSOPHY. *Mr. Jones* and *Mr. Sayre*. A study of the main currents of European philosophy from the earliest Greek thinkers through modern philosophic thought. The course is designed to be a general and cultural introduction to philosophy through a study of its history. 3 units. Two sections. *MWF, 10, 2:15*.

a, 57b. PROBLEMS OF PHILOSOPHY. *Mr. Iredell* and *Mr. Sayre*. An introductory consideration of the meaning and method of philosophy, an examination of problems which emerge in the physical and biological sciences, and a review of some of the main philosophic estimates of life. 3 units. Two sections. *TThS, 8, 10*.

d. PHILOSOPHY OF ART. *Mr. Jones*. Designed primarily for students working in some form of artistic expression who are interested in studying the significance and limitations of the esthetic experience. 3 units. First semester. *MWF, 2:15*.

e. ORIENTAL PHILOSOPHY. *Mr. Iredell*. This course is designed to provide the student with a general background of oriental thought as a basis for further study of oriental life and culture. An attempt will be made to gain an appreciation of the thought life of the Orient through a study of some of the more important thinkers and schools of oriental philosophy and through a comparison of oriental and western philosophical views and cultural ideals. 3 units. First semester. *MWF, 8*.

f. TYPES OF ETHICAL THEORY. *Mr. Sayre*. A consideration of some representative solutions for the main problems of moral theory. The course is designed for students interested in thinking critically about ordinary beliefs concerning conduct. 3 units. First semester. *TThS, 9*.

g. PHILOSOPHY OF THE STATE. *Mr. Sayre*. A critical investigation of such general political concepts as: the state, society, the individual, freedom, law, rights, duty, property, etc. The course will emphasize applications to currently competing systems; it is therefore designed for the student who is keenly aware of the clashes in ideals around him and who is willing to push systematically to the roots of these clashes. 3 units. Second semester. *TThS, 9*.

h. READINGS IN THE HISTORY OF PHILOSOPHY. *Staff*. A course consisting of readings, papers, and oral reports. The material is designed to enrich a student's knowledge of philosophical literature and to aid him to integrate his work in the field and to relate it to the material of other fields. The content of the course may vary according to the needs of those enrolled and may be repeated for credit for a total of 6 hours. (The total amount of credit which a student may earn in Philosophy 141 and 142 is limited to 9 hours.) The course is limited to Juniors and Seniors and normally is open only to those

concentrating in Philosophy. Permission of the instructor is required. units. Each semester. Arranged.

142. READINGS IN THE PROBLEMS OF PHILOSOPHY. *Staff*. A course consisting of readings, papers, and oral reports. The material is designed to enrich student's knowledge of the systematic aspects of philosophy and to aid him to integrate his work in the field and to relate it to the material of other fields. The content of the course may vary according to the needs of those enrolled and may be repeated for credit for a total of 6 hours. (The total amount of credit which any student may earn in Philosophy 141 and 142 is limited to 9 hours.) The course is limited to Juniors and Seniors and normally is open only to those concentrating in Philosophy. Permission of the instructor is required. 1-3 units. Each semester. Arranged.

151. SOME REPRESENTATIVE PHILOSOPHIES OF LIFE. *Mr. Jones*. A study of the views of four philosophical poets — Lucretius, Dante, Goethe, and T. S. Eliot. 3 units. (Omitted in 1951-52.)

152. THE NINETEENTH CENTURY. *Mr. Jones*. A study of the main currents of 19th century thought and of their reflection in the literature, the history, and the social movements of the period. 3 units. Second semester. *MWF*, 8.

153. PHILOSOPHY OF SCIENCE. *Mr. Sayre*. A consideration of the basic concepts and methods underlying contemporary scientific thought. The concepts of space, time, matter, energy, empirical method, etc. will be examined critically with special emphasis on current post-Newtonian theory. 3 units. Second semester. *MWF*, 8. (Omitted in 1951-52.)

154. CONTEMPORARY PHILOSOPHY. *Mr. Iredell*. A study of contemporary philosophic thought with special reference to the dominant ideas of the civilization of today. Prerequisite, Philosophy 55 or 57, or such previous work as will provide an equivalent grasp of the basic problems of philosophy. 3 units. Second semester. *MWF*, 8.

HISTORY OF POLITICAL THOUGHT. For description see Government 182.

PHILOSOPHY OF RELIGION. For description see Religion 101.

INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. For description see Education 151.

AVAILABLE AT SCRIPPS COLLEGE

IV-54. LITERARY INTERPRETATIONS OF PHILOSOPHICAL QUESTIONS. *Mr. Barrett*. First semester. *MWF*, 11.

IV-57. LOGIC. *Mr. Barrett*. Second semester. *MWF*, 11.

IV-158. STANDARDS AND VALUES. *Mr. Barrett*. Second semester. *MWF*, 10.

Physical Education

The program of Physical Education in Pomona College is based upon the belief that a liberal education should include knowledge of the structure and functions of the human mechanism; understanding of the hygienic practices which promote physical, mental and social health; reasonable skill in developmental and recreational activities of a physical type which will promote the individual's well-being during college years, and in later life; and a disposition to make such knowledge and skill essential elements in effective living.

A student is required to take one unit of Physical Education Activities per semester during his Freshman and Sophomore years, and one-half unit per semester during his Junior and Senior years.

CONCENTRATION IN PHYSICAL EDUCATION

This program, followed by a year of work in the Claremont Graduate School, will qualify the student for the general credential with a major in physical education. It will also qualify the student for advanced work in physical therapy, occupational therapy, and recreation. Students interested in the three latter fields should confer with some member of the physical education department during the freshman year since slight changes in the following program may be needed to qualify for entrance to some of these fields.

In order to complete all required courses in the four year college period students should take courses in the year in which they are suggested below.

FRESHMAN YEAR: Biology 1, English 1, Physical Education 5. Suggested: Speech and Drama 52.

SOPHOMORE YEAR: Zoology 60, Education 53, Psychology 51, Sociology 51 and 52.

JUNIOR YEAR: Zoology 121, Physical Education 123, 124, 129, 119 (women), Psychology 107. Suggested: Music 53.

SENIOR YEAR: Physical Education 126, 152, 154, 191 (men), 130 (women), Psychology 108.

In addition to the above, 6 units of physical education activities are required. It is suggested that these be so selected as to give the individual opportunity for both technical skills and leadership training in a wide range of activities. Reading knowledge of French and German is highly desirable for students planning graduate research in physical education.

A non-credit Camp Counselor's training course for women is held for a two week period immediately following Commencement when there is sufficient student demand for this course. The course aims to provide its members with experience and skills useful in summer camps, playgrounds, and other activities of community recreation.

THEORY

5. PRINCIPLES OF HEALTHFUL LIVING. *Staff*. An introduction to personal hygiene dealing with the meaning and significance of physical, mental, and social health as related to the individual and to society. Constructive methods of promoting the health of the individual. Defensive hygiene. Special problems of college students and young people generally. Women, 3 units, first semester, *Miss Shurtz, MWF, 10*. Men, 2 units, first semester. *Malan. MW, 11*.

119a-119b. (Women) TECHNIQUE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Miss Shurtz*. Analysis of techniques and methods of presenting them for teaching at the elementary and secondary level. Laboratory work includes officiating in all team sports and playdays as well as assisting in teaching of the team sports. Prerequisite—knowledge of the following physical education activities: archery, badminton, basketball, hockey, softball, speedball, swimming, tennis, and volleyball. 3 units. Given in alternate years. *MWF, 9*.

123. NATURE AND FUNCTION OF PLAY. *Miss Cawthorne*. The psychology of play and the function of play in growth, development and social adjustment. Methods of leadership and organization of play activities to bring out the best habits and use of the democratic process in play situations. Special attention is given to the elementary school physical education program. First semester. 2 units. *TTh, 8*.

124. COMMUNITY RECREATION. *Miss Cawthorne*. A study of the organization of school and municipal playgrounds and the contributions of the federal government to recreation programs in the United States. History of the Recreation Movement in the United States. Types of organization and leadership needed for conducting tournaments, active and quiet play programs, social recreation and camp activities. Study of the physical lay-out of different types of recreation centers. Survey of administrative set-ups for municipally financed recreation programs. Limited to Juniors and Seniors. Second semester. 2 units. *TTh, 8*.

126. COMMUNITY HYGIENE. *Miss Shurtz*. A survey of the field of public health and sanitation. Includes a brief historical account, a study of general factors influencing public health and a summary of public health agencies, their organization and activities. Extensive study of public and private water supplies, disposal of wastes, control of food and dairy products, proper medicine and quackery, and mental, industrial and school hygiene. Attention given to methods of setting up a school health program. Second semester. 3 units. *MWF, 10*.

129. KINESIOLOGY. *Miss Cawthorne*. An analysis of joint and muscle mechanisms, and their relation to problems of bodily development and efficiency. Prerequisite, Anatomy. 3 units. Second semester. *MWF, 8*.

130b. THE HISTORY AND TEACHING OF DANCE. *Miss Burt*. Analysis of problems and techniques of presentation of rhythms for those preparing for recreational leadership or for teaching at the elementary or high school level. The first semester includes the historical background of both folk and contemporary dance and the theory and practice of teaching folk dancing; the second semester includes a study of a creative process in dance, dance composition, and the techniques of teaching contemporary dance. Permission of the instructor is required. One hour lecture, two hours laboratory each semester. 2 units. Lecture *M*, 10; laboratory *WF*, 10.

131. PHYSICAL DEVIATIONS. *Miss Cawthorne*. Study of body mechanics and causes, prevention, and correction of physical defects. Laboratory work includes methods of examination, prescription of exercises. Prerequisite, 129. 2 units. First semester. *MW*, 8; and laboratory *F*, 8-10.

132. PRINCIPLES OF PHYSICAL EDUCATION. *Mr. Malan*. Limited to Seniors preparing to teach Physical Education. 3 units. Second semester. *MWF*, 11.

133a, 191b. (Men) THEORY AND PRACTICE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Staff*. Limited to senior majors in Physical Education and Education. Others must have permission of department. 4 units. *WF*, 1:15-2:15 arranged. Practice teaching, three hours, arranged.

MEN

Students engage in programs of physical education activities selected according to individual needs as determined by medical and physical examinations and tests. Complete freedom in the choice of activities is permitted only to men who maintain acceptable standards in health, physical development, and physical efficiency. Among the minimum requirements of the Department are good posture, ability to swim, elementary skill in self defense, proficiency in fundamental activities, reasonable skill in at least one individual sport and in one team game.

The following physical education activities are carried on under supervision of the Department: Archery, badminton, baseball, basketball, bowling, boxing, corrective exercises, cross country running, dancing, fencing, football, golf, gymnastics, life saving, softball, swimming, tennis, touch football, track and field athletics, tumbling, volleyball, water polo, weight lifting, and wrestling. Fees as indicated are required each semester of those who elect archery (\$1.50), fencing (\$7.00), golf (\$10.00), and bowling (\$21.00).

The Department conducts a competitive intramural program including sports in season for which credit is granted.

The college program of intercollegiate athletics is an integral part of the program of Physical Education. No student is permitted to participate in more strenuous forms of competition without a certificate from the College Physician indicating that the individual is physically fit for such participation.

The student obtains credit in the required courses listed below by participation in activities selected in accordance with the principles set forth in the preceding paragraphs.

1a-1b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

2a-2b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required of Freshman year not taking Military Science. $\frac{1}{2}$ unit. Arranged.

53a-53b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

54a-54b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required of Sophomore year not taking Military Science. $\frac{1}{2}$ unit. Arranged.

105a-105b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Junior year. $\frac{1}{2}$ unit. Arranged.

107a-107b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Senior year. $\frac{1}{2}$ unit. Arranged.

WOMEN

Medical and physical examination is given all entering students with subsequent posture tests. Physical activities are allowed or prescribed as the result of these examinations. Participation in a fundamental activity is required each semester of the Freshman year. Students may have freedom of election in other activities in so far as medical and physical examinations warrant, but must include by the end of the Sophomore year one individual sport, one semester of either folk or contemporary dance. The passing of a swimming achievement test is required for graduation. It should be completed by the end of the Sophomore year.

Activity fees are charged for badminton, riflery, and archery (\$5 semester), golf (\$10 semester), riding (\$60 semester), fencing (\$7 semester).

ACTIVITY

Six units of Physical Education Activities are required for graduation. One unit is credited for 11a-b, Fundamentals, which includes courses organized to teach the basic fundamentals of physical activity. The remaining five units may be earned by participation in other activities.

FUNDAMENTALS: contemporary dance, swimming, individual gymnastics, group gymnastics.

TEAM SPORTS: basketball, softball, speedball, hockey, volleyball.

INDIVIDUAL SPORTS: archery, badminton, tennis, golf, riflery, swimming, fencing.

DANCING: contemporary, folk and square.

11a-11b. FUNDAMENTALS. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

12a-12b. SPORTS OR DANCING. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

63b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore
1/2 unit. Arranged.

64b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore
1/2 unit. Arranged.

115b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Junior
1/2 unit. Arranged.

117b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Senior
1/2 unit. Arranged.

Physics

A minimum concentration program in physics includes 25 units of upper division physics, Mathematics 1, 65, 151, and Chemistry 1. Additional work in physics, mathematics, chemistry, German, engineering drawing, and descriptive geometry is recommended. A minimum concentration program in physics will normally be elected by those who plan to use physics in combination with training in some other field, and who do not plan to do graduate work in physics.

A student who plans to do graduate work in physics will be expected to take 31 units of upper division physics, Mathematics 1, 65, 151, and not less than six units selected from Mathematics 119, 152, 185, and 210. The student will be expected to establish a good foundation in chemistry and to acquire a reading knowledge of German. Courses in descriptive geometry and engineering drawing are recommended.

All students concentrating in physics will consult with the physics staff prior to their concentration examination during the first week of their senior year.

1. INTRODUCTION TO PHYSICAL SCIENCE. *Mr. Fryer*. A non-mathematical course intended for those who wish to obtain a knowledge of the fundamental theories and applications of physics. The lectures will be illustrated by numerous experimental demonstrations and the subject will be developed from the basis of the discrete structure of electricity and matter. Fee \$5.00 each semester. 3 units. *MWF, 10.*

2a-1b. GENERAL PHYSICS. *Mr. Fowler*. A study of the phenomena and laws of mechanics, heat, wave motion, sound, electricity, magnetism, and light. This course is designed to furnish a working knowledge of the basic principles of physics and is planned especially for those students who expect to continue studies in physics, chemistry, engineering or medicine. Prerequisite, Mathematics 1a-1b preceding or accompanying the course. 4 units. Laboratory fee \$5.00. *TT&S, 8. Laboratory MTW or F, 1:15-4:05.*

110. HEAT AND THERMODYNAMICS. *Mr. Henke*. A course dealing with principles of thermodynamics and the theory of heat. The first and second laws of thermodynamics and their application to liquids, vapors, and gases will be emphasized. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF, 11.*

113a-113b. MECHANICS. *Mr. Henke*. Kinematics, dynamics, and statics of particles and rigid bodies with applications to problems of physics and engineering. Prerequisite, Physics 51, Mathematics 65. 3 units. *TThS, 9.*

141a, 141b. ELECTRICITY AND MAGNETISM. *Mr. Fryer*. A course in the theory of electricity and electromagnetism. Emphasis will be placed on the fundamental laws of electrostatics and electrodynamics, electrical circuit theory and introductory electromagnetic field theory. Prerequisite, Physics 51, Mathematics 151 preceding or accompanying the course. 3 units. *TThS, 8.*

142a, 142b. ELECTRICAL MEASUREMENTS. *Mr. Fryer*. Laboratory in electrical and electromagnetic measurements. Prerequisite, Physics 141 preceding or accompanying this course. 1 unit. Laboratory fee \$4.00. *T, 1:15-4:05.*

153. OPTICS. *Mr. Fowler*. The fundamentals of geometrical optics. Theory and applications of physical optics with emphasis upon the phenomena of interference, diffraction and polarization of light. Prerequisite, Physics 51, Mathematics 65. 3 units. First semester. *MWF, 9.*

154. OPTICAL MEASUREMENTS. *Mr. Henke*. Experimental study of phenomena of geometrical and physical optics. Laboratory to accompany Physics 153. 1 unit. First semester. Laboratory fee \$4.00. *Th, 1:15-4:05.*

155. ATOMIC STRUCTURE. *Mr. Fowler*. An introduction to modern theory of atomic and nuclear structure, elementary particles, and radiations. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF, 10.*

156. ADVANCED PHYSICS LABORATORY. *Mr. Fryer*. Independent experimental study of selected subjects in modern physics. Prerequisite, approval of instructor. 1 unit. Second semester. Laboratory fee \$4.00. *Th, 1:15-4:05.*

191a, 191b. MATHEMATICAL PHYSICS. *Mr. Fowler*. Application of mathematics to selected subjects in classical and quantum physics. Prerequisite, approval of the instructor. 3 units. *TThS, 10.*

Psychology

Students concentrating in psychology are required to take psychology 53, 24 units of upper division courses including psychology 194. As a part of the latter requirement, 6 units may be offered from the following courses: Psychology 112, Zoology 121, Government 160, Mathematics 194, Sociology 194. Students should note that some of these courses are not offered every year. Training in zoology, physics, chemistry, French and German is recommended for students planning to do graduate work in psychology. Psychology 52 and 53 is prerequisite to all further work in the department with the exception of Psychology 101 and 102. Child Psychology may be taken concurrently with 51b or 53.

51b. INTRODUCTION TO PSYCHOLOGY. *Staff*. Fundamental facts and principles of consciousness and behavior. The relation of the nervous system to mental processes and action. Practical applications in various fields. 3 units. Three sections, *MWF, 11, and TThS, 9, 10.*

52. INTRODUCTION TO PSYCHOLOGY. *Mr. Stevenson*. An intensive survey of psychology recommended for students planning to concentrate in psychology, followed by Psychology 53. Emphasis on learning, motivation, thinking, perception, special capacities. 3 units. First semester. *TThS, 9.*

53. INTRODUCTION TO PSYCHOLOGICAL METHODS. *Mr. Harsh*. Discussion and demonstration of methods of studying psychological problems and evaluating them. Laboratory experiments. Laboratory fee \$1.50. Prerequisite: Psychology 52 or permission of instructor. 3 units. Second semester. Lecture *M, 2:15-3:05.* Laboratory, *WF, 2:15-4:05.*

54. PSYCHOLOGICAL STATISTICS. *Mr. Harsh*. Correlation methods, probability, chi-square, tests of significance. Prerequisite: Psychology 53 or permission of instructor. 3 units. First semester. *TTh, 1:15-3:05.*

55. INDIVIDUAL DIFFERENCES. *Mr. Ellis*. A study of the nature and extent of individual differences and their causes as determined by objective methods. Age, sex, and race differences. Genius, subnormality, insanity and criminality. Organization of mind. Applications in various fields are considered briefly. 3 units. First semester. *MWF, 9.*

56. EDUCATIONAL PSYCHOLOGY. *Mr. Ellis*. Practical applications of psychology to education. The nature of the learner; intelligence and motivation; principal features of the learning process. 3 units. First semester. *TThS, 10;* Second semester, *MWF, 9.*

57. CHILD PSYCHOLOGY. *Mr. Stevenson*. A survey of development and behavior of the young child. Prerequisite: Psychology 51a or 52. 3 units. Second semester. *MWF, 10.*

117. **PHYSIOLOGICAL PSYCHOLOGY.** *Mr. Stevenson.* Physiological and aspects of psychological functions. Permission of instructor required. 3 units. Second semester. *TThS*, 9.

131. **ABNORMAL PSYCHOLOGY.** *Mr. Harsh.* Problems of maladjustment factors contributing to mental disorders; methods of diagnosis and therapy. Prerequisite: Psychology 51 or 52. 3 units. First semester. *MWF*, 10.

137. **ASSESSMENT OF PERSONALITY.** *Mr. Harsh.* Concepts regarding the nature and organization of personality; techniques for testing or evaluating personality characteristics. Prerequisites: Psychology 108, 131. 3 units. Second semester. *MWF*, 10.

154. **SOCIAL PSYCHOLOGY.** *Mr. Harsh.* Cultural determinants of behavior; dynamics of interpersonal relations and group action; methods of studying social behavior. Prerequisite: Psychology 51 or 52. 3 units. First semester. *MWF*, 11.

156. **MENTAL TESTS.** *Mr. Stevenson.* Survey of principles and methods of measuring intelligence. Prerequisites: Psychology 51 or 52, 53. 3 units. First semester. *MF*, 2:15-3:05, *W*, 2:15-4:05.

158. **MENTAL TESTS PRACTICUM.** *Mr. Stevenson.* Supervised experience in administering individual mental tests. Prerequisites: Psychology 102, 137, and permission of instructor. Enrollment limited to 8 students. 3 units. Second semester. *M*, 2:15-4:05 and arranged.

168. **ADVANCED CHILD PSYCHOLOGY.** *Mr. Stevenson.* Consideration of methods for studying children and adolescents. Prerequisites: Psychology 108, 137, and permission of instructor. 3 units. First semester. *MWF*, 10.

170. **THEORIES OF LEARNING.** *Mr. Harsh.* Consideration of the leading theories concerning the nature of learning and its significance for general psychology. Prerequisite: 12 units of psychology. 3 units. Second semester. *MWF*, 11.

188. **EXPERIMENTAL PSYCHOLOGY.** *Mr. Harsh.* Analysis of the design and methodology of recent psychological experiments. Students will perform comparative experiments. Laboratory fee \$1.50. 3 units. Second semester. *T*, 1:15-3:05. (Omitted in 1951-52.)

194. **SENIOR READING COURSE.** *Mr. Ellis.* A course designed to supplement and integrate the different courses offered to meet the concentration requirement in psychology and to prepare students for the comprehensive examination. Required of seniors who are concentrating in psychology. 2-4 units. Either semester. *T*, 3:15 and arranged.

AVAILABLE AT SCRIPPS COLLEGE

IV-110. **GROWTH AND DEVELOPMENT OF THE CHILD.** *Mrs. Jones.* Prerequisite: Elementary Psychology. Year course. *MWF*, 11.

112. CHILD STUDY IN THE NURSERY SCHOOL. *Mrs. Jones*. Prerequisite, Elementary Psychology and IV-110. Year course. *MW*, 2:15 and arranged hours in the Nursery School.

114. NURSERY SCHOOL PROCEDURE. *Mrs. Jones*. Prerequisite, IV-112. Year course. *MW*, 3:15-4:05 and arranged hours in the Nursery School.

119. HUMAN PSYCHOBIOLOGY. *Mr. Caster*. Registration by permission of instructor. Year course. *TThS*, 8.

Religion

Students planning to concentrate in religion must take the following lower division courses or their equivalents: Religion 1, 2, and 65; History 1, and Philosophy 55. Twenty-four hours of upper-division work, of which eighteen must be in the field of religion, are required. Among the minimum of fifteen the following, totaling fifteen hours, are considered essential: 101, 106, 107, 141, and 191a. Six units of upper-division courses may be taken in related fields of English, government, history, philosophy, psychology, and sociology.

Students transferring to Pomona at the beginning of the Junior year may concentrate in religion if lower division requirements have been met prior to entrance or can be met during the Junior year.

1. THE RELIGION OF THE OLD TESTAMENT. *Staff*. A course designed as a general introduction to Old Testament ideas. The developing beliefs and practices of Hebrew religion will be considered in their historical sequence, beginning with the patriarchal period and ending with Judaism of the second century before Christ. 3 units. First semester. Four sections. *MWF*, 8, 9; *TThS*, 8, 9.

2. THE RELIGION OF THE NEW TESTAMENT. *Staff*. A course designed as a general introduction to New Testament religious ideas. Attention will first be given to the teaching of Jesus, followed by a study of the message of Paul and a consideration of the developing religious views of the early Christian community. 3 units. Second semester. Four sections. *MWF*, 8, 9; *TThS*, 8, 9.

65 65b. GREAT PERSONALITIES IN CHRISTIAN HISTORY. *Mr. von Rohr*. A survey of the development of Christian beliefs as reflected in the thought of some of the outstanding representatives of the Christian tradition. Among persons studied during the first semester will be Paul, Augustine, Francis of Assisi, and Thomas Aquinas, and during the second semester Erasmus, Luther, Calvin, George Fox, and John Wesley. 3 units. *MWF*, 8.

101. PHILOSOPHY OF RELIGION. *Mr. von Rohr*. A course for the general student, aiming to clarify problems of religion confronting the modern mind. Discussion will center around such topics as the existence and nature of God, the nature of man, the problem of evil, and the questions of prayer and immortality. 3 units. First semester. *MWF*, 9.

102. CONTEMPORARY RELIGIOUS THOUGHT. *Mr. von Rohr*. A systematic investigation of some of the significant movements in present-day Christian thinking in both Europe and America. Major writings, reflective of various points of view, will be read and discussed. 3 units. Second semester. *MWF*,

107. LIFE AND TEACHINGS OF JESUS. A specialized study of the contents of the four Gospels. Beginning with an analysis of the available records and their reliability, attention will be given to the facts and theories concerning the life of Jesus, followed by a consideration of the content and purpose of his teaching. 3 units. First semester. *MWF*, 10.

141. CHRISTIAN ETHICS. A general introduction to the ethical principles of the Hebrew-Christian tradition, studied in the light of their historical development. 3 units. First semester. *TThS*, 9.

142. CHRISTIANITY AND MODERN SOCIETY. A study of the tensions which Christianity faces in its application to problems of the political, economic, and social orders. Roles of both the Christian individual and the Christian group will be considered. 3 units. Second semester. *TThS*, 9.

160. CATHOLICISM AND PROTESTANTISM. *Mr. von Rohr*. A study of the significant similarities and differences in the two major strains of the Christian tradition. Attention will first be given to an understanding of Roman Catholic beliefs and practices, followed by a study of Protestantism in both its original and modern forms. 3 units. Second semester. *MWF*. (Offered in alternate years. Omitted in 1951-52.)

170. PSYCHOLOGY OF RELIGION. An investigation of the varieties of religious experience in the light of the conclusions of modern psychologies. Both individual and group religious behavior will be studied. 3 units. Second semester. *TThS*, 8.

191a, 191b. ADVANCED READINGS IN RELIGION. *Staff*. An independent reading program for students concentrating in the field of religion. 3 units. Arranged by permission of instructor.

AVAILABLE AT SCRIPPS COLLEGE

IV-140. LIVING RELIGIONS OF THE WORLD. *Mr. Hogue*. Year course. Open to sophomores by permission. *TTh*, 8.

IV-141a, 141b. CHRISTIANITY IN AMERICA SINCE 1865. *Mr. Hogue*. Admission by permission of instructor. Arranged.

Romance Languages and Literatures

Concentration in the Romance Languages is designed for students who are planning to teach one or more of the group, or to enter some form of foreign service, or for those who wish to develop an appreciation of the cultures involved. Preparatory work in Latin is recommended and will be found very helpful. Attention is called to the fact that the intermediate courses in French and Spanish meet Lower Division Requirement 6.

A student planning to concentrate in a single Romance Language is required to take at least 24 units in courses numbered over 100 in the language selected. Work in this language should, if possible, have been started before entering college.

For a concentration in a combination of the Romance Languages, 36 hours upper division work are required.

Students who expect to teach one of the Romance Languages are urged to take work in at least one other language of the group.

Related subjects recommended for students concentrating in the department: English Literature, Comparative Literature, History, Philosophy, History of Art, Music Appreciation.

FRENCH

Courses for concentration: Any courses numbered over 100. Of the courses in the literature, French 120 should be taken first.

101b. **ELEMENTARY.** *Staff.* Essentials of grammar; dictation and speaking. Cultural approach with the emphasis on the acquisition of reading ability. Extensive outside readings in addition to the work in class. This course is the general preparation for French 51; however superior achievement may admit to French 81. Students with a special interest in conversation should enroll concurrently in French 2. 3 units. 2 sections. *MWF, 10; TThS, 9.*

102b. **ELEMENTARY CONVERSATION.** *Staff.* A course in spoken French to accompany French 1 and open only to students enrolled in that course, except with the consent of the instructor. Outside preparation will be kept to a minimum. 1 unit. *WF, 11.*

105b. **INTERMEDIATE.** *Staff.* A course designed for those students who have completed two years of high school French, or six units of college French. Grammar review and conversational practice; intensive class reading of selected modern short stories, plays and novels of literary value; extensive outside readings in various literary types selected according to the needs and special interests of the individual student; written reports. Through readings and class discussions the student in this course will become acquainted with modern French writers in a variety of literary types. Normally followed by French 81, but superior achievement in this course may admit to upper division work. 3 units. Two sections. *MWF, 9; TThS, 8.*

61a, 61b. INTERMEDIATE CONVERSATION. *Miss Obrecht*. A course in spoken French stressing fluency and accuracy through the use of dialogues, repetition and recording machines. Outside preparation will be kept to a minimum. Students enrolled in this course must also be enrolled in French 51 or a higher level course, or must have the consent of the instructor. 1 unit. *WF*, 1:15.

81a-81b. ADVANCED INTERMEDIATE. *Miss Obrecht*. A course designed for students who have completed French 1 and 51, or for freshmen who have had three or more years of high school French. Conducted in French as far as possible. Rapid grammar review; extensive class and outside reading at a higher level than in French 51; written reports in French. Through class and outside readings the student in this course should make the acquaintance of a considerable number of modern writers in a variety of literary types. 3 units. *MWF*, 9.

120a-120b. SURVEY OF FRENCH LITERATURE AND CIVILIZATION. *Miss Obrecht*. Outline of the development of French literature and culture. Reading selections to give the student a comprehensive view of the history of French literature and life of the French. 3 units. *MWF*, 10.

124a-124b. FRENCH LITERATURE FROM ROUSSEAU TO ZOLA. (Omitted in 1951-52.)

125a-125b. FRENCH LITERATURE FROM ZOLA TO THE PRESENT. *Miss Obrecht*, *Mrs. Glenn (Scripps)*. The major authors and works of Naturalism, Symbolism and the present century will be studied in relation to the background of the period—political, economic, artistic. The development of thought will also be considered. Alternates with French 124. 3 units. *1:15-2:30*.

141a-141b. ADVANCED CONVERSATION AND COMPOSITION. *Miss Obrecht*. This course conducted entirely in French. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of correct pronunciation and intonation. Open to students who have completed French 81 or equivalent. Alternates with French 153. 3 units. *TTA*, 8. (Omitted in 1951-52.)

153a, 153b. LITERATURE OF THE SEVENTEENTH CENTURY. *Miss Obrecht*. Intensive study of the great masters of the French classical age: Corneille, Molière, Racine. Lesser study of Descartes, Pascal, La Rochefoucauld, La Fontaine, and others. Historical background; lectures; reading assignments; written reports in French. Alternates with French 141. 3 units. *TT&S*, 8.

ITALIAN

61a-61b. ELEMENTARY. *Mr. Crowell*. A rapid survey of the grammar and vocabulary with special emphasis on the pronunciation. Extensive reading of modern Italian. A thorough grounding in French, Spanish or Latin is strongly recommended. 3 units. *MWF*, 11.

SPANISH

Courses for concentration: Any courses numbered over 100. Of the courses in the literature, Spanish 113, 114 should be taken first. For concentration in the field of Latin American Civilization, see page 76; the concentration on International Relations, page 74.

EMENTARY. Available to Pomona students at Claremont Men's College, Spanish 10a, 10b. 3 units.

14-71b. INTERMEDIATE. *Miss Husson, Mr. Crowell.* A course designed for those students who have completed two years of high school Spanish, or six units of college Spanish. Grammar review and drill in conversation; intensive reading of selected modern short stories, plays and novels of literary value; extensive outside readings in various literary types selected according to the needs and special interests of the individual student; written reports. Through these extensive readings it is hoped to give the student an acquaintance with modern Spanish writers in a variety of literary types. Normally followed by Spanish 91, but superior achievement in this course may admit upper division work. 3 units. *MWF, 10.*

14-91b. ADVANCED INTERMEDIATE. *Miss Husson, Mr. Crowell.* A course designed for students who have completed Spanish 11 and Spanish 71, or for freshmen who have had three or more years of high school Spanish. Conducted in Spanish as far as possible. Rapid grammar review; extensive class and outside readings at a higher level than in Spanish 71; written reports in Spanish. Through class and outside readings the student in this course should make the acquaintance of a considerable number of modern authors in a variety of literary types. 3 units. *TThS, 9.*

14-10. MODERN SPANISH THEATRE. *Miss Husson.* Study of the works of the leading Spanish playwrights from 1800 to the present time. Reading of certain plays in class; reports on individual outside readings. Conducted in Spanish. 3 units. First semester. *TThS, 10.*

14-11. MODERN SPANISH NOVEL. *Miss Husson.* Study of the principal Spanish novels from 1800 to the present time with emphasis on the novel. Extensive outside readings; written reports. Conducted in Spanish. 3 units. Second semester. *TThS, 10.*

15-151b. ADVANCED CONVERSATION AND COMPOSITION. *Mr. Crowell.* A course conducted entirely in Spanish. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of correct pronunciation and intonation. Comprehension of the spoken language developed in part through participation in the class activities of native speakers. Open to students who have completed Spanish 91 or equivalent. 3 units. *TThS, 10.*

171a, 171b. SPANISH LITERATURE FROM 1140 TO 1650. (Omitted in 1951-52)
The work of this course is available to Pomona students in Spanish I-15
at Scripps College. 3 units. MWF, 11.

173a, 173b. MEXICAN LITERATURE. *Mr. Crowell*. Class study of select
works from colonial times to the present day. Extensive outside readings
the literature and on the history and culture. Individual written reports
Spanish. First semester: The Colonial Period and the Nineteenth Century
Second semester: Contemporary Mexico from 1910 on. 3 units. Alternat
with 175. TTh, 2:15-3:30. (Omitted in 1951-52.)

175a, 175b. SPANISH AMERICAN LITERATURE. *Mr. Crowell*. Class study
outstanding literary works of Hispanic South America. Extensive outsi
readings; individual reports in Spanish. 3 units. Alternates with 173. TT
2:15-3:30.

AVAILABLE AT SCRIPPS COLLEGE

I-155. SURVEY OF SPANISH LITERATURE. *Mrs. Lamb*. Year course. MWF, 1

I-156. LATIN AMERICAN THEATRE. *Mrs. Lamb*. Year course. MW, 2:15-3:3

* * *

In the Romance field the graduate work offered under the Claremont
Graduate School centers on the following periods of the literature: French
Old French. 17th Century, 18th Century, 19th Century, Contemporary Period
Spanish: Pre-Golden Age, Golden Age, Spanish and Spanish American
19th Century, and Contemporary Period.

Russian

1a-1b. ELEMENTARY RUSSIAN. *Mr. Ein*. Essentials of grammar, pronoun
tion, constant exercises in reading and writing, practice in speaking. In
vidual assignments in reading, writing and speech which will correspond
each student's needs and interests. 3 units. TThS, 9.

51a, 51b. INTERMEDIATE RUSSIAN. *Mr. Ein*. More advanced Russian langua
study through daily reading, writing, and translating. Continued practice
Russian conversation. Reading of Russian texts which serve as an introd
tion to Russian life, history and literature. Reading of selected classics
Russian. Individual assignments will correspond to each student's needs a
interests (e.g. Sciences, History, Politics, Military Russian, etc.). 3 un
Arranged.

Sociology

Requirements for concentration: Sociology 51, normally taken in the Sophomore year, and 24 units of upper division courses in sociology. However, 3 of these 24 units may be chosen from the following: Economics 111, Government 7, Psychology 154.

Recommended courses: Students concentrating in sociology will find it helpful to take as many of the following courses as possible: Economics 51 and 57, Government 51 or Political Economy 1, History 1, Psychology 51, Religion 142.

Lower Division distribution: Sociology 51 and 52 constitute the integrated course for students who expect to take only one year of sociology. For those planning more extensive work in sociology, Sociology 51 and any *two* higher numbered semester courses will meet the distribution requirement.

1. **INTRODUCTORY SOCIOLOGY.** *Staff.* Man's cultural heritage and collective behavior. The origin, structure, and functioning of human groups, and their role in personality and cultural development. The principal social processes, such as competition, conflict, cooperation, and assimilation. Results of social change. Not open to Freshmen. 3 units. First semester. Four sections. *TThS, 9; MWF, 11, 1:15.*

2. **SOCIAL PROBLEMS.** *Mr. Scaff.* A survey of the major problems of present-day society related to individual, family, community, and world disorganization. Typical problems studied are crime, delinquency, alcoholism, marital adjustment, race antagonism, labor relations, migration, and population pressures. Intended to follow Sociology 51 for students who plan to take only one year of sociology. Not recommended for students who intend to take several specialized courses such as Race Relations, Criminology, etc. Prerequisite: Sociology 51. 3 units. Second semester. Two sections. *TThS, 8, 9.*

3. **CULTURAL ANTHROPOLOGY.** *Mr. Baber.* The emergence of man and the development of his essential culture patterns, from Stone Age to Iron Age. The rise of language, writing, art, and the basic social institutions. A comparison of human behavior in widely separated primitive cultures to reveal the constant as well as the variable features of human society. The invention, diffusion, and integration of culture traits in the process of cultural change. Prerequisite: Sociology 51. 3 units. First semester. (Omitted in 1951-52.)

4. **SOCIAL WELFARE.** *Mr. Scaff.* A survey of the various fields of social work and the major techniques and theories involved. Includes a description and analysis of case work, family welfare, child welfare, child guidance clinics, school social work, probation supervision, medical and psychiatric social work, group work, public welfare, and community organization. Visits to selected agencies. Prerequisite: Sociology 51, or *two* of the following: Economics 51, Government 51, Political Economy 1, History 1. 3 units. First semester. *MWF, 8.*

107. **CRIMINOLOGY AND PENOLOGY.** *Mr. Baber.* Types of criminal behavior. The making of the criminal; causative factors. Changing interpretations of crime. Methods of dealing with criminals through the police, courts, prison, probation, and parole. Special treatment of juvenile delinquents; preventive measures. Prerequisite: Sociology 51, or *two* of the following: Economics 51, Government 51, Political Economy 1, History 1. 3 units. Second semester. Two sections. *MWF, 9, 11.*

109. **MARRIAGE AND THE FAMILY.** *Mr. Baber.* Factors involved in mate selection and the husband-wife and parent-child relationships. Adjustment of marriage and family patterns to our rapidly changing culture. Analysis of the factors promoting family disorganization; measures seeking to conserve the social values of family life. Prerequisite: Junior or Senior standing. 3 units. First semester. *MWF, 9.*

110. **RACE RELATIONS.** *Mr. Baber.* Concepts of race and culture. The nature of race contact and the development of race consciousness and conflict patterns. The experience of several nations with racial minorities, with emphasis upon American experience with Negroes, Mexicans, and Orientals. Social areas and trends of prejudice and discrimination. Prerequisite: Sociology 51, or *two* of the following: Economics 51, Government 51, Political Economy 1, History 1. 3 units. Second semester. (Omitted in 1951-52; given again in 1952-53.)

111. **POPULATION AND MIGRATION PROBLEMS.** *Mr. Scaff.* Factors influencing population growth or decline. The social and economic effects of an increasing, static, or declining population. The significance of the rates of increase in the different racial, economic, or social elements of the population. Suggested policies for controlling the quantity and quality of the population. Trends of internal migration, especially to the Pacific Coast. Prerequisite: Sociology 51, or sufficient background in the other social sciences to satisfy the instructor. 3 units. First semester. *MWF, 8.* (Alternates with 112.)

112. **THE AMERICAN COMMUNITY.** *Mr. Scaff.* An analysis of modern American urban communities in contrast with rural communities. Urban ecology applied to the Los Angeles area. The community's class structure and institutional composition. Community planning. Approximately half the course devoted to lectures and discussions, half to field investigation and projects in the local area. Prerequisite, Sociology 51 and instructor's permission. 3 units. First semester. (Omitted in 1951-52; given again in 1952-53.)

152. **SOCIAL CONTROL.** *Mr. Baber.* An analysis of human nature and social origin. The evolution of social control and its increasing complexity due to the acceleration of social change in modern culture. Society's means of creating and maintaining its social patterns, through law, public opinion, propaganda, education, religion, rewards, etc. Individual control versus social control. Open to Juniors and Seniors only. Prerequisite, Sociology 51. 3 units. Second semester. *WF, 1:15-2:30.* (Alternates with 110.)

. THEORIES OF SOCIAL REFORM. *Mr. Scaff.* A study of various proposals of social reconstruction including: the Utopians, Marxian Socialism, Fabian Socialism, Syndicalism and Guild Socialism. An investigation of contemporary experiments in social reorganization: the British Labor Movement, German Socialism, Italian Fascism, Russian Communism, and the Cooperative Movement at home and abroad. Prerequisite: Sociology 51, or *two* of the following: Economics 51, Government 51, Political Economy 1, History 1. Open to Juniors and Seniors only. 3 units. First semester. *MWF, 10.*

. TWENTIETH CENTURY SOCIOLOGY. *Mr. Scaff.* The rise of modern sociology from the time of Comte and Spencer. Attention to various movements in social thought. Emphasis on the major contributions from Europe and America to sociological theory since 1900. Prerequisite: Sociology 51. Open to Juniors and Seniors only. 3 units. Second semester. *MWF, 10.*

a-191b. SOCIAL INVESTIGATION. *Mr. Baber.* Methods of investigation and research as applied to both individual and group work. The effective presentation of social data. Observation and analysis of the work of various social agencies and programs. Individual projects for some; supervised field experience (in selected agencies) for others, according to the interests and needs of the student. Open only to seniors with the written permission of the instructor. 3 units. Arranged.

Speech and Dramatics

Requirements for concentration:

Upper Division Courses: Speech and Dramatics 32a, 32b, 51 (at least two of these), 57, 61a, 61b, and History 1a-1b, in fulfillment of which requirements transfer students may offer equivalent courses pursued at other colleges.

Upper Division Courses: Speech and Dramatics 134a, 134b, 155a, 155b, 160a-160b, and Scripps II-150 or English 104b and 192 or Comparative Literature 14, 148b or 181a, 181b, or Speech and Dramatics 112a-112b or 131a, 131b. Proficiency in at least one modern foreign language (preferably French) is recommended.

In the comprehensive examination the books on a supplementary reading list will be included.

In addition to the comprehensive examination, a demonstration of creative ability in the field of concentration is required.

In addition to the required work in the Speech and Dramatics concentration, the following offerings are suggested as suitable electives, the choice among them depending on the student's particular interests: *Lower Division:* Art

3a-3b and 51a-51b, Music 53a-53b, Speech and Dramatics 52a, 52b and 53b, Scripps II-80, English 50a, 50b, 58, and 64. *Upper Division:* Art 10105b, Music 103a-103b, Physical Education 130a, 130b, Spanish 113 and 114, French 120a-120b, Scripps I-106 and I-107, English 103, 111, 151.

32a, 32b. VOICE AND DICTION. *Mr. Scott.* Study of the mechanics of voice production and of the elements of English phonetics. Practice designed to develop good voice and diction. Permission of the instructor required for registration. 2 units. *MW, 11.*

51a, 51b. PLAY PRODUCTION. *Staff.* Directed study in play production, both in acting and in the technical problems of the stage. One unit of credit may be granted for either fifty hours of rehearsal time under direction, or for fifty hours of technical work under direction, or for fifty hours of rehearsal and technical work combined. Not more than two units of credit may be granted in any one year. A total of eight units of credit may be applied toward graduation.

52a, 52b. FUNDAMENTALS OF SPEECH. *Mr. Scott.* Exercise in voice development and platform deportment. Training in analysis of subjects, selection and arrangement of material, psychological adaptation of material and training to specific audiences. 2 units. *MW, 9.*

53a, 53b. PRINCIPLES OF INTERPRETATIVE READING. *Mr. Scott.* Study of technique of effective oral interpretation of literature. Application of technique in the reading of various literary types. 2 units. *TTh, 10.*

55a, 55b. ARGUMENTATION AND DEBATE. *Mr. Scott.* Study of the principles of argumentation and practical application of these principles in class debate. Debate subjects for the year analyzed and debated. 2 units. *Th, 2:15-3:50.*

61a, 61b. CHARACTER PRESENTATION IN DRAMATIC LITERATURE. *Miss B. Mrs. Allen.* An approach to dramatic literature through the actor's art. Study of theories of acting and principles of stage behavior. Pantomime, improvisation to develop concentration, observation, imagination, coordination, and control. Scenes from plays, both classic and modern, will be studied with emphasis on interpretation. Permission of instructor required. 3 units. *TThS, 10.*

112a-112b. PLAYWRITING. *Mrs. Allen.* The theory of playwriting with supervised practice in this technique. A study will be made of the structure and style of significant plays for their light on the problems of the beginning playwright. Permission of instructor required. Alternates with Speech and Dramatics 160. 3 units. *TThS, 9.* (Omitted in 1951-52.)

131a, 131b. ADVANCED SPEECH. *Mr. Scott.* Training in the construction and delivery of formal addresses. Prerequisite, Speech and Dramatics 52a. 2 or 3 units. *TTh, 9.*

a, 134b. READING OF DRAMATIC LITERATURE. *Mr. Scott.* Intensive study of a limited number of standard plays, with emphasis on dramatic values in character and plot. Interpretative reading of these plays in class. Recital programs before the class. Prerequisite, Speech and Dramatics 53 or equivalent. 3 units. *MWF, 10.*

a-160b. THEATRE PRACTICE. *Mrs. Allen.* A survey of historical backgrounds of stage forms and of contemporary production methods. A study of theories, problems, and techniques of production applied to plays of various periods. Analysis of problems confronting the theatre worker, in acting, production, design, criticism, and management. Practical experience in directing short play. Advanced problems in the analysis and presentation of character, with concentration on *styles* of acting. Representative plays of various periods (Greek, Elizabethan, Restoration, Eighteenth Century, Modern) will be studied for study and practice. 3 units. Alternates with Speech and Dramatics 53. *TThS, 9.* (Omitted in 1951-52.)

INTRODUCTION TO DRAMA. For description see English 57.

SHAKESPEARE. For description see English 155a, 155b.

AVAILABLE AT SCRIPPS COLLEGE

150a, 150b. HISTORY OF THEATRE AND DRAMA. *Mr. Workman.* *MWF, 11.*

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POMONA COLLEGE CAMPUS PLAN

(See map on opposite page)

1. Eli P. Clark Hall, residence for men.
 2. Frary Hall, central dining hall for men.
 3. Eli P. Clark Hall, residence for men.
 4. Memorial Training Quarters for men.
 5. War Memorial Gymnasium and Swimming Pool.
 6. Smiley Hall, residence for men.
 7. Edmunds Union, including student offices, cooperative store, ballroom and lounges.
 8. Holmes Hall, classrooms and assembly hall.
 9. Crookshank Hall, botany, biology, and zoology laboratories.
 10. Mason Hall, chemistry and geology laboratories.
 11. Harwood Hall, department of psychology.
 12. Pearsons Hall, physics laboratory, mathematics department.
 13. Carnegie Library.
 14. Mabel Shaw Bridges Auditorium, great auditorium seating 2600, operated by Claremont College in behalf of the Associated Colleges.
 15. Renwick Gymnasium.
 16. Seaver Laboratory, containing classrooms and library for the department of astronomy.
 17. Frank P. Brackett Observatory.
 18. Open-Air Theatre.
 19. Replica of original home of Pomona College.
 20. Sumner Hall, administration and classroom building.
 21. Mabel Shaw Bridges Hall of Music, assembly hall for recitals and church services; music studios and practice rooms.
 22. Rembrandt Hall, art studios.
 23. President's House.
 24. Claremont Inn, guest house for college and community, private and public dining rooms.
 25. Baldwin House.
 26. Harwood Court, residence hall for women.
 27. Aurelia Squier Harwood Memorial Dining Hall for women.
 28. Della Mulock Mudd Hall, residence for women.
 29. Florence Carrier Blaisdell Hall, residence for women.
 30. Jessie E. Gibson Dining Hall for women.
 31. Maison Française, residence for women majoring in French.
 32. Casa Española, residence for women majoring in Spanish.
 33. Field House for women's athletics.
 34. Heating Plant for the Associated Colleges.
- A. Business Office for the Associated Colleges at Claremont.
 B. Library of Claremont Graduate School.
 C. Dispensary, office of Physician serving the Associated Colleges.
 Infirmary for the Associated Colleges is located on Amherst Avenue north of Foothill Blvd.

- CAMPUS · PLAN -



TENTH - ST.

CLAREMONT
COLLEGE

NINTH ST

SCRIPPS COLLEGE

CLAREMONT
MEN'S COLLEGE

EIGHTH ST.

SEVENTH.

PARKING

ALUMNI
ATHLETIC FIELD

BASE BALI

MARSTON QUADRANGLE

TENNIS

PARKING

BLANCHARD
PARK

WOMEN'S ATHLETICS

☐ BUS DEPOT

FIFTH ST.

FOURTH

COUNTY
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SECOND

POST
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FIRST ST.

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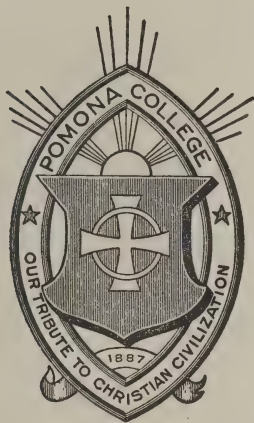
APRIL, 1952

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1952-1953



Pomona College

CLAREMONT, CALIFORNIA

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JUL 11 1952

UNIVERSITY OF ILLINOIS

CALENDAR FOR 1952

JANUARY	FEBRUARY	MARCH	APRIL
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CALENDAR FOR 1953

JANUARY	FEBRUARY	MARCH	APRIL
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COLLEGE CALENDAR FOR 1952-53

FIRST SEMESTER

SEPTEMBER 19, FRIDAY	Residence halls open for new students only, 12 noon. First meal served, dinner at 6 p.m. Meeting of Joint Committee
SEPTEMBER 19-22	Program for new students
SEPTEMBER 20, SATURDAY	Faculty Meeting, 10 a.m.
SEPTEMBER 22, MONDAY	Conference Day and Registration for new students
SEPTEMBER 23, 24 TUESDAY AND WEDNESDAY	Registration for returning students. Residence halls open for returning students. First meal served to returning students, breakfast, Tuesday. day.
SEPTEMBER 25, THURSDAY	First semester classes begin, 8 a.m. Opening Convocation, 11 a.m.
OCTOBER 9, THURSDAY	Last day for entering courses
OCTOBER 16, THURSDAY	Founders Day, Flame Ceremony, 11 a.m.
NOVEMBER 3, MONDAY	First low grade report due
NOVEMBER 6, THURSDAY	Final day for withdrawal from classes without penalty
NOVEMBER 26, WEDNESDAY	Thanksgiving recess begins, 9:30 p.m.
DECEMBER 1, MONDAY	Thanksgiving recess ends, 8 a.m.
DECEMBER 8, MONDAY	Second low grade report due
DECEMBER 18, THURSDAY	Christmas vacation begins at noon
JANUARY 5, MONDAY	Christmas vacation ends, 8 a.m.
JANUARY 24, SATURDAY	Last day of classes
JANUARY 26, MONDAY	Final examinations begin
FEBRUARY 4, WEDNESDAY	Final examinations end
FEBRUARY 7, SATURDAY	First semester ends

COLLEGE CALENDAR FOR 1952-53

SECOND SEMESTER

FEBRUARY 9, MONDAY	Opening day for classes at Scripps College, Pomona students enrolled in Scripps courses are expected to attend.
FEBRUARY 10, TUESDAY	Registration for Juniors and Seniors
FEBRUARY 11, WEDNESDAY	Second semester classes begin, 8 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 12, THURSDAY	Opening Convocation, second semester, 11 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 25, WEDNESDAY	Last day for entering courses
MARCH 14, SATURDAY	Matriculation Day
MARCH 23, MONDAY	First low grade report due
MARCH 25, WEDNESDAY	Final day for withdrawal from classes without penalty
APRIL 4, SATURDAY	Spring vacation begins, noon
APRIL 13, MONDAY	Spring vacation ends, 8 a.m.
MAY 2, SATURDAY	Second low grade report due
MAY 23, SATURDAY	Last day of classes for Seniors
MAY 30, SATURDAY	Memorial Convocation, 5 p.m.
MAY 30, SATURDAY	Last day of classes
JUNE 1, MONDAY	Final examinations begin
JUNE 7, SUNDAY	Associated Colleges Baccalaureate
JUNE 10, WEDNESDAY	Final examinations end
JUNE 13, SATURDAY	Alumni Day
JUNE 14, SUNDAY	Commencement
JUNE 18, THURSDAY	Scholarship Committee Meeting
JUNE 19, FRIDAY	Joint Committee Meeting

BOARD OF TRUSTEES

OFFICERS

Rudolph J. Wig, *President*
Arthur J. McFadden, *Vice-President*
Fred W. Smith, *Vice-President*

TERM OF OFFICE EXPIRES JUNE, 1952

Willis H. Merrill, <i>Long Beach</i>	Rudolph J. Wig, <i>San Marino</i>
George L. Eastman, <i>Hollywood</i>	Frederick S. Bale, <i>Pasadena</i>
William W. Clary, <i>Pasadena</i>	

TERM OF OFFICE EXPIRES JUNE, 1953

George S. Sumner, <i>Claremont</i>	Mark H. Harrington, <i>Pasadena</i>
Arthur M. Dole, <i>Pomona</i>	Morris B. Pendleton, <i>San Marino</i>
Mrs. Victor Montgomery, <i>Beverly Hills</i>	George R. Martin, <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1954

Fred W. Smith, <i>Ojai</i>	Roy E. Thomas, <i>Los Angeles</i>
Elmo H. Conley, <i>Pasadena</i>	Paul Fussell, <i>Pasadena</i>
William A. Johnson, <i>San Marino</i>	Robert H. Craig, <i>Palos Verdes Estates</i>

TERM OF OFFICE EXPIRES JUNE, 1955

Frank R. Seaver, <i>Los Angeles</i>	Clarence T. Stover, <i>Claremont</i>
Robert P. Jennings, <i>Sierra Madre</i>	Carl I. Wheat, <i>San Francisco</i>
Paul S. Armstrong, <i>Los Angeles</i>	Herbert S. Rempel, <i>Pasadena</i>

TERM OF OFFICE EXPIRES JUNE, 1956

William B. Himrod, <i>Hollywood</i>	Yale B. Griffith, <i>Santa Barbara</i>
Arthur J. McFadden, <i>Santa Ana</i>	E. Wilson Lyon, <i>Claremont</i>
Charles E. Donnelly, <i>Los Angeles</i>	James W. Fifield, Jr., <i>Los Angeles</i>

HONORARY MEMBERS

Donald G. Aplin, <i>Highland</i>	Luther Freeman, <i>Claremont</i>
William S. Mason, <i>Pasadena</i>	Mary McLean Olney, <i>Berkeley</i>
Ernest E. Jones, <i>Claremont</i>	David P. Barrows, <i>Berkeley</i>
Mary Clark Eversole, <i>La Canada</i>	
George W. Bryant, <i>San Marino</i>	

EX-OFFICIO MEMBERS

Managing Director, Claremont College
President of the Alumni Association
President of the Women's Campus Club
President of the Pomona College Associates

FORMER PRESIDENTS OF THE COLLEGE

Cyrus G. Baldwin, 1890-1897	Franklin L. Ferguson, 1897-1901
George A. Gates, 1901-1910	James A. Blaisdell, 1910-1928
Charles K. Edmunds, 1928-1941	

GENERAL ADMINISTRATION

1952-53

- WILSON LYON
President
209 Sumner Hall
B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; D.Litt., Occidental College.
- AUL H. BURTON
Controller
Harper Hall
B.A., Western Reserve University.
- WILLIAM V. SHANNON
Treasurer
Harper Hall
B.S., Virginia Military Institute.
- MARJORIE B. WOODFORD
Assistant Treasurer
Harper Hall
B.A., Pomona College; M.A., Columbia University.
- LENN V. FULLER
Bursar
Harper Hall
B.A., Ohio State University.
- LEN F. HAWLEY
Director of Alumni and Public Relations
203 Sumner Hall
B.A., Pomona College; Graduate Student, Harvard University.
- WILLIAM B. HIMROD
Assistant to the President
203 Sumner Hall
B.A., Pomona College. Graduate Student, University of Southern California.
- HN F. MOULDS
Assistant to the President
200 Sumner Hall
Ph.B., University of Chicago.
- ENNETH G. BEYER
Public Relations Officer
203 Sumner Hall
B.A., M.A., Whittier College.
- DUIS K. DIMMICK
Alumni Secretary
212 Sumner Hall
B.A., Pomona College.
- JOSEPH H. FIRMAN
Director of the News Bureau
108 Sumner Hall
B.A., Amherst College; B.J., M.A., University of Missouri; Graduate Student, Stanford University.
- AGNES M. JOHNSON
Executive Secretary to the President
209 Sumner Hall

INA T. NIDER

Social Director, Women's Camp
Harwood Cou

B.A., Fresno State College; M.A., Columbia University.

EDWIN ALLEN PHILLIPS

Social Director, Men's Camp
Eli P. Clark Hu

B.A., Colgate University; M.A., Ph.D., University of Michigan.

MAY C. FRANK

Director of Residence Hall
Mudd Ha

B.S., Columbia University; M.S., Iowa State College.

LUCILLE GRAMSE MCCARTHY

Director of Dining Hall
Frary Ha

B.S., M.S., Kansas State College of Applied Science.

HAROLD HONORE'

Campus Engineer
987 Dartmouth Avenue

The Faculty

Date denotes beginning of original term of service

ADMINISTRATIVE OFFICERS

- ISAIAH WILSON LYON 345 College Ave.
President, 1941.
B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; Litt.D., Occidental College.
- FRANCIS RAYMOND IREDELL 1060 College Ave.
Dean of the Faculty, and Professor of Philosophy on the Robert C. Denison Foundation, 1925.
B.A., Pomona College; M.A., Ph.D., Harvard University.
- EDWARD SANDERS³ 739 Harvard Ave.
Dean of Students and Dean of Admissions, 1942.
B.A., Hendrix College; M.A., Ph.D., Columbia University.
- MELTON L. BEATTY 246 E. Seventh St.
Dean of Men, 1949.
B.A., University of Tennessee; M.A., Cornell University; Doctoral Candidate, Stanford University.
- JOAN B. WALTON 136 E. Seventh St.
Dean of Women on the Martha N. Hathaway Foundation, 1949.
B.A., Swarthmore College; M.A., Brown University; Ph.D., University of Pennsylvania.
- MARGARET MAPLE 4326 Via Padova
Registrar, 1940.
B.A., Pomona College.
- WILLIAM L. WHEATON 328 Oakdale Drive
Assistant Dean of Admissions, 1949; Acting Dean of Admissions, 1952-53.
B.A., Pomona College; M.A., New York University.
- DAVID W. DAVIES 524 W. Tenth St.
Librarian, 1947.
B.A., University of California at Los Angeles; M.A., University of California; Ph.D., University of Chicago.
- ALBERT S. COLTRIN 455 W. Twelfth St.
College Physician, 1940.
B.A., Pomona College; M.D., University of Rochester. Interne, Resident in Medicine, University of California Hospital; Fellow in Urology, Presbyterian Hospital, New York City; Exchange Fellow in Physiology, University of Kiel, Germany.
- ROBERT RANKIN 254 E. Seventh St.
Chaplain of Associated Colleges Church, 1951.
B.A., State University of Iowa; B.D., M.A., Yale University.

EMERITI

- WALTER ALFRED ALLEN 175 E. Twelfth S
Emeritus Professor of Musical Theory and Appreciation. 1912.
 B.A., Beloit College; B.Mus., Yale University. Associate, American Guild of Organists.
- GRACE ELLA BERRY 353 W. Eleventh S
Emeritus Dean of Women and Associate Professor of Mathematics. 1909.
 B.S., M.A., Mount Holyoke College.
- BERNARD CAPEN EWER 706 Indian Hill Blvd
Emeritus Professor of Psychology. 1916.
 B.A., M.A., Brown University; Ph.D., Harvard University.
- MARION JEANETTE EWING 455 W. Seventh S
Emeritus Assistant Librarian. 1912.
 B.A., Olivet College; B.S., Simmons College; M.A., Boston University.
- CHARLES TABOR FITTS 4435 N. Live Oak Driv
Emeritus Professor of Education. 1919.
 B.A., Amherst College; M.A., University of California. Graduate study, Harvard University.
- JESSIE EDITH GIBSON 68 S. La Senda, Three Arch Bay, South Laguna
Emeritus Dean of Women on the Martha N. Hathaway Foundation. 1927.
 B.A., University of Idaho; M.A., University of Washington. Graduate study, California and Columbia Universities.
- WILLIAM ATWOOD HILTON 1293 Dartmouth Av
Emeritus Professor of Zoology on the Willard George Halstead Foundation. 1905.
 B.S., Ph.D., Cornell University.
- ERNEST E. JONES 905 College Av
Treasurer Emeritus. 1909.
 B.A., Pomona College.
- CYRIL JURECKA 163 W. Eleventh S
Emeritus Assistant Professor of Art. 1932.
 Graduate, Imperial and Royal College of Sculpture, Horice, Bohemia.
- WILLIAM KIRK 705 Indian Hill Blvd
Emeritus Professor of Sociology on the Henry Snyder Foundation. 1922.
 B.A., Ph.D., Johns Hopkins University.
- ELLIOTT CURTIS LINCOLN 472 W. Tenth S
Emeritus Professor of English on the Phebe Estelle Spalding Foundation. 1924.
 B.A., Colby College; M.A., State College of Washington and Harvard University.
- RALPH HAINE LYMAN 357 W. Tenth S
Emeritus Professor of Applied Music, Head of Department of Music. 1917.
 B.A., Grinnell College. Student in voice with Karleton Hackett, William B. Oldham, Grant Hadley, Arthur Middleton, Courtland Cooper, Holmes Cowper and other American masters and with Vittorino Moratti in Berlin. D.Mus., Grinnell College.
- HELEN MARBURG 446 Grinnell Driv
Emeritus Associate Professor of Romance Languages. 1940.
 B.A., University of London; Ph.D., Stanford University.

- RUCE McCULLEY 210 E. Foothill Blvd.
Emeritus Professor of English Literature. 1921.
 B.A., Hiram College; M.A., University of Chicago; Ph.D., Harvard University.
- WILLIAM EVAN NICHOLL 240 E. San Jose
Emeritus Dean of Students. 1919.
 B.A., Bellevue College; M.A., Columbia University. Graduate study, Edinburgh University.
- EUGENE WHITE NIXON 3163 Indian Hill Blvd.
Emeritus Professor of Physical Education for Men. 1916.
 B.A., Monmouth College; M.A., Columbia University. Graduate study, Illinois and California Universities.
- VERETT SAMUEL OLIVE South Laguna
Emeritus Professor of Piano. 1923.
 B.Mus., Simpson College. Graduate study, Simpson College.
- WILLIAM POLK RUSSELL 540 E. Sixth St.
Emeritus Professor of Mathematics on the Joseph W. Fiske Foundation. 1904.
 B.A., M.A., Cumberland University.
- GEORGE STEDMAN SUMNER 305 College Ave.
Emeritus Professor of Economics and Sociology. 1897.
Controller, 1922-1941.
 B.A., Pomona College; B.A., Ph.D., Yale University.

PROFESSORS

- RAY ERWIN BABER 999 College Ave.
Professor of Sociology on the Henry Snyder Foundation, 1939.
 B.A., Campbell College; M.A., Ph.D., University of Wisconsin.
- KARL BAUMANN 460 University Circle
Professor of German, 1931.
 Ph.D., University of Basel.
- MAN BENSON 455 University Circle
Professor of Botany on the Henry Kirke White Bent Foundation, 1944.
 B.A., M.A., Ph.D., Stanford University.
- FOYD A. BOND 234 W. Eighth St.
Professor of Economics on the Stedman-Sumner Foundation, 1948.
 B.A., M.A., Ph.D., University of Michigan.
- FREDERICK BRACHER 230 W. Seventh St.
Professor of English, 1944.
 B.S., Oregon State College; M.A., Ph.D., University of California.

CH'EN SHOU-YI

690 Indian Hill Blvd.

Professor of Chinese Culture, 1941.

B.A., Lingnan University; Ph.D., University of Chicago; Fellow of the Academy of Sinica.

JAMES WHITE CROWELL

450 University Circle

Professor of Romance Languages, 1929.

B.S., M.A., Haverford College; Ph.D., Cornell University.

HAROLD DAVIS³

612 W. Tenth St.

Professor of English on the Phebe Estelle Spalding Foundation, 1927.

B.A., Stanford University; B.A. and B.Litt., University of Oxford.

FRED EASTMAN

Visiting Professor of Religion, 1952.

B.A., Litt.D., College of Wooster; Graduate, Union Theological Seminary.

ROBERT SIDNEY ELLIS¹

1217 Dartmouth Ave.

Professor of Psychology, 1931.

B.A., University of Arkansas; Ph.D., Clark University.

KENNETH G. FISKE

585 W. Twelfth St.

Professor of Music, 1936.

B.Mus., M.Mus., American Conservatory of Music. Pupil of Leon Sametini, Jacques Gordon, Otokar Sevcik.

CHARLES A. FOWLER, JR.

256 E. Second St.

Professor of Physics on the Seeley W. Mudd Foundation, 1947.

B.A., M.S., University of Utah; Ph.D., University of California.

JOHN HOWES GLEASON

512 Baughman Ave.

Professor of History on the Warren Finney Day Memorial Foundation, 1939.

B.A., Ph.D., Harvard University; B.Litt., University of Oxford.

HUBERT HERRING

225 E. Eleventh St.

Professor of Latin American Civilization, 1945.

B.A., Oberlin College; M.A., Columbia University; Graduate, Union Theological Seminary.

FRANCIS RAYMOND IREDELL

1060 College Ave.

Professor of Philosophy on the Robert C. Denison Foundation, and Dean of the Faculty, 1925.

B.A., Pomona College; M.A., Ph.D., Harvard University.

CHESTER GEORGE JAEGER²

1045 Yale Ave.

Professor of Mathematics on the Joseph N. Fiske Foundation, 1931.

B.A., B.S., M.A., Ph.D., University of Missouri.

WILLIAM THOMAS JONES

4201 Via Padova

Professor of Philosophy, 1938.

B.A., Swarthmore College; B.Litt., University of Oxford; Ph.D., Princeton University.

HN HASKELL KEMBLE³

Professor of History, 1936.

B.A., Stanford University; M.A., Ph.D., University of California.

EDERICK LUDWIG MULHAUSER, JR.¹

Professor of English, 1941.

B.A., College of Wooster; M.A., Ph.D., Yale University.

424 W. Eleventh St.

RL GEORGE PARRISH

Professor of Music, 1949.

B.Mus., MacPhail School of Music; M.A., Cornell University; Ph.D., Harvard University.

338 Harvard Ave.

ILLIS E. PEQUEGNAT

Professor of Zoology on the Willard George Halstead Foundation, 1940.

B.A., University of California; Ph.D., University of California at Los Angeles.

433 Harrison Ave.

ILLIS CONWAY PIERCE

Professor of Chemistry on the Carnegie Foundation, 1945.

B.S., D.Sc., Georgetown College; M.S., Ph.D., University of Chicago.

145 E. Eleventh St.

LOIS SCHARDT

Visiting Professor of Art, 1950.

Ph.D., University of Wuerzburg, Bavaria.

452 S. College Ave.

NJAMIN DAVID SCOTT

Professor of Public Address, 1923.

B.A., University of Southern California; S.T.B., Ph.D., Boston University. Graduate work, Brown and Harvard Universities.

828 College Ave.

NEST ALBERT STRATHMAN

Professor of English, 1932.

B.A., M.A., Ph.D., Johns Hopkins University.

160 W. Eleventh St.

BERT LOBINGIER STREHLE

Professor of Physical Education for Men, 1923.

B.A., Pomona College; M.A., Claremont Graduate School; Graduate study, University of Southern California, University of California, Stanford University.

1019 Dartmouth Ave.

LLIAM WARREN SWEET

Visiting Professor of History, 1952.

B.A., Litt.D., Ohio Wesleyan University; B.D., Drew Theological Seminary; Th.M., Crozer Theological Seminary; M.A. and Ph.D., University of Pennsylvania; D.D., Cornell College.

ON ALBERT VIEG⁸

Professor of Government, 1945.

B.A., St. Olaf College; M.A., University of Iowa; Ph.D., University of Chicago.

435 W. Eighth St.

ERT L. WADLINGTON, JR.

Professor of Military Science and Tactics, 1951.

B.S., University of Tennessee; Lt. Colonel, Infantry, United States Army.

243 S. Mills Ave.

WALTER TICKNOR WHITNEY² 445 W. Tenth
*Professor of Astronomy on the Frank P. Brackett Foundation and Director of
 Observatory, 1929.*
 B.S., M.S., Pomona College; Ph.D., University of Chicago.

ALFRED OSWALD WOODFORD 443 W. Tenth
Professor of Geology, 1915.
 B.A., Pomona College; Ph.D., University of California.

ASSOCIATE PROFESSORS

VIRGINIA PRINCEHOUSE ALLEN 175 E. Twelfth
Associate Professor of Dramatics, 1930.
 B.A., Pomona College; Graduate study, Department of Drama, Yale University; M.
 Claremont Graduate School.

JOSEPH WARNER ANGELL³
Associate Professor of English, 1939.
 B.A., College of Wooster; M.A., University of Oregon; Graduate study, Yale University.

WILLIAM G. BLANCHARD 1495 Via Zu
Associate Professor of Music and College Organist, 1936.
 B.Mus., DePauw University; M.Mus., University of Michigan. Further study with
 Weinrich and Hugh Porter in organ and with Seth Bingham in composition.

ELIZABETH CAWTHORNE 228 Harvard A
Associate Professor of Physical Education for Women, 1935.
 B.A., M.A., University of California.

DARYL DAYTON 262 W. Sixth
Associate Professor of Music, 1938.
 B.Mus., Oberlin College; Graduate study in Berlin and New York with Artur Schna
 Leonard Shure, Dalies Frantz, and Guy Maier.

EDWARD MONTGOMERY FRYER⁸ 231 W. Tenth
Associate Professor of Physics, 1946.
 B.A., Pomona College; M.E., Ph.D., Stanford University.

HUGH J. HAMILTON 1269-C Harvard A
Associate Professor of Mathematics, 1936.
 B.A., University of California at Los Angeles; M.A., Ph.D., Brown University.

CORWIN HERMAN HANSCH⁸ 129 E. Sixth
Associate Professor of Chemistry, 1946.
 B.S., University of Illinois; Ph.D., New York University.

COLVIN HEATH 750 Indian Hill B
Associate Professor of Physical Education for Men, 1922.
 B.A., Pomona College; M.A., Stanford University.

CHARLES SHIVELY HOLMES 1245 Dartmouth A
Associate Professor of English, 1941.
 B.A., Oberlin College; Ph.D., Princeton University.

- ORDON CANFIELD LEE 1035 Columbia Ave.
Associate Professor of Education, 1948.
 B.A., University of California; M.A., Ph.D., Columbia University.
- UTHER JAMES LEE, JR. 443 W. Eleventh St.
Associate Professor of Government, 1941.
 B.A., Pomona College; M.A., Ph.D., University of California.
- ILES D. MCCARTHY 444 Harrison Ave.
Associate Professor of Zoology, 1946.
 B.S., West Chester State Teachers College; Ph.D., University of Pennsylvania.
- ARL JAY MERRITT 1865 E. Foothill, Glendora
Associate Professor of Physical Education, 1925.
 B.A., Pomona College; M.A., Claremont Graduate School.
- ENRY CORD MEYER³ 470 Harrison Ave.
Associate Professor of History, 1946.
 B.A., University of Colorado; M.A., University of Iowa; Ph.D., Yale University.
- OUIS B. PERRY 2929 Claremont Hts. Drive
Associate Professor of Economics, 1947.
 B.A., M.A., Ph.D., University of California at Los Angeles.
- DWIN ALLEN PHILLIPS Eli P. Clark Hall
Associate Professor of Botany, 1948.
 B.A., Colgate University; M.A., Ph.D., University of Michigan.
- WIGHT LEONARD RYERSON³ 107 E. San Jose
Associate Professor of Zoology, 1946.
 B.A., M.S., University of Arizona; Ph.D., University of California at Los Angeles.
- LVIN HEWITT SCAFF 670 S. College Ave.
Associate Professor of Sociology, 1947.
 B.A., University of Texas; B.D., Chicago Theological Seminary; M.A., Ph.D., University of Texas.
- HN SEWALL SHELTON 1100 Oxford Ave.
Associate Professor of Geology, 1946.
 B.A., Pomona College; Ph.D., Yale University.
- NELSON SMITH 145 E. Sixth St.
Associate Professor of Chemistry, 1945.
 B.A., Pomona College; M.A., Ph.D., Stanford University.
- HN ROBERT VON ROHR³ 1111 Harvard Ave.
Associate Professor of Religion, 1945.
 B.B.A., University of Minnesota; B.D., Chicago Theological Seminary; Ph.D., Yale University.

EMILIE ELIZABETH WAGNER

783 W. Tenth

Associate Professor of German, 1928.

B.A., Smith College; M.A., Pennsylvania State College. Doctorat de l'Université Lettres, Toulouse.

EDWARD WEISMILLER

137 N. College A

Associate Professor of English, 1949.

B.A., Cornell College; M.A., Harvard University; D.Phil., University of Oxford.

ASSISTANT PROFESSORS

YOST U. AMREIN

346 Harvard A

Assistant Professor of Zoology, 1951.

B.A., M.A., Ph.D., University of California at Los Angeles.

THOMAS B. BELL

417 E. Cucamonga A

Assistant Professor of Physical Education for Men, 1947.

B.A., M.A., University of California.

MARGERY SMITH BRIGGS

420 Baughman A

Assistant Professor of Music, 1943.

B.Mus., B.Mus.Ed., M.Mus., Chicago Musical College.

KAREN BURT

14569 E. Teton Dr., Puer

Assistant Professor of Physical Education for Women, 1943.

B.E., University of California at Los Angeles; M.A., University of Southern California.

HARRY JOSEPH CARROLL, JR.

916 Harvard A

Assistant Professor of Classics, 1948.

B.A., University of Akron; M.A., Ph.D., Harvard University.

EDWIN S. FUSSELL

686 Colorado

Assistant Professor of English, 1951.

B.A., Pomona College; M.A., Ph.D., Harvard University.

JOEL GREENSPOON

1130 Harvard A

Assistant Professor of Psychology, 1951.

B.S., University of Virginia; M.A., University of Pennsylvania; Ph.D., Indiana University.

GRETCHEN GRAF JORDAN

628 Dartmouth A

Assistant Professor of English, 1947.

B.A., M.A., Ohio State University; Ph.D., University of California at Los Angeles.

ROBERT F. LEGGEWIE

260 E. Third S

Assistant Professor of Romance Languages, 1951.

B.S., Loyola University; M.A., University of Southern California; A.M., Ph.D., Harvard University.

RICHARD N. LOUCKS

145 W. Seventh S

Assistant Professor of Music, 1948.

B.A., Pomona College; M.A. and Doctoral Candidate, Eastman School of Music.

SHELDON H. MENDELSON

457 Grinnell D

Assistant Professor of Military Science and Tactics, 1950.

B.C.E., City College of New York; Advanced Infantry School; Captain, Infantry United States Army.

- DENISE OBRECHT** 160 E. Foothill Blvd.
Assistant Professor of French, 1950.
 Licence ès-lettres, Diplôme d'Études Supérieures, University of Strasbourg; Doctorat, Sorbonne, Paris.
- EUGENE ROBERT PURPUS**
Visiting Assistant Professor of English, 1952.
 B.A., M.A., Ph.D., University of California at Los Angeles.
- WILLIAM F. RUSSELL** 202 N. College Ave.
Assistant Professor of Music, 1951.
 B.A., Columbia University; M.A., Harvard University; doctoral candidate, Harvard University.
- MARION SHOWS** 121 W. Sixth St.
Assistant Professor of Religion, 1951.
 B.A., Occidental College; B.D., Union Theological Seminary; Ph.D., Columbia University.
- MAXINE J. SHURTZ** 712 Yale Ave.
Assistant Professor of Physical Education for Women, 1947.
 B.S., Miami University; M.S., Wellesley College.
- HAROLD W. STEVENSON** 448 Grinnell Ave.
Assistant Professor of Psychology, 1950.
 B.A., University of Colorado; M.A., Ph.D., Stanford University.
- ELMER B. TOLSTED** 105 N. College Ave.
Assistant Professor of Mathematics, 1947.
 B.S., M.S., University of Chicago; Ph.D., Brown University.

INSTRUCTORS

- FRANK C. CHILD**
Instructor in Economics, 1952.
 B.A., University of Utah; M.A., and doctoral candidate, Stanford University.
- FREDRYC R. DARBY** 1390 Harvard Ave.
Instructor in Government, 1949.
 B.A., M.A., Occidental College; Doctoral Candidate, University of California.
- JAMES E. GRANT** 305 W. Eleventh St.
Instructor in Art, 1950.
 B.E., M.F.A., University of Southern California; Student at Jepson Art Institute.
- GEORGE KENNETH HELMKAMP**
Instructor in Chemistry, 1952.
 B.A., Wartburg College; M.A., Claremont College; doctoral candidate, California Institute of Technology.
- MURTON HENKE** 153 E. Sixth St.
Instructor in Physics, 1948.
 B.A., Miami University; M.A. and Doctoral Candidate, California Institute of Technology.
- MARGOT JEAN** 224 S. Doheny Dr., Beverly Hills
Visiting Instructor in Violoncello, 1946.
 Pupil of Jacob at the Royal Conservatoire in Brussels.

KARL GEORGE KOHN

135 E. Sixth S

Instructor in Music, 1950.

Studied piano in Vienna; Teacher's Certificate and Artist Diploma, New York College of Music; B.A., Harvard University. Advanced study in conducting with Julius Pruewer, theory and composition with Paul Hindemith, Walter Piston, and Randall Thompson.

VINCENT H. LEARNIHAN

220 W. Tenth S

Instructor in History, 1949.

B.A., M.A., Doctoral Candidate, University of California at Los Angeles.

EDWARD W. MALAN

118 Oakpark Driv

Instructor in Physical Education for Men, 1950.

B.A., Pomona College; M.A., Claremont Graduate School; Graduate Student, University of California at Los Angeles.

LEE CAMERON McDONALD

Instructor in Government, 1952.

B.A., Pomona College; M.A., University of California at Los Angeles; doctoral candidate, Harvard University.

JACK C. MILLER

Rt. 1, Box 18, Upland

Instructor in Physics, 1952.

B.A., Pomona College; M.A., University of California; doctoral candidate, University of Oxford.

GERHARD N. ROSTVOLD

Instructor in Economics, 1952.

B.A., M.A., and doctoral candidate, Stanford University.

WOODROW WILSON SAYRE^{*}

780 N. Mountain Av

Instructor in Philosophy, 1948.

B.A., Williams College; M.A., and Doctoral Candidate, Harvard University.

SEYMOUR SLIVE

Instructor in Art, 1951.

B.A., University of Chicago, doctoral candidate, University of Chicago.

FREDERICK SONTAG

Instructor in Philosophy, 1952.

B.A., Stanford University; doctoral candidate, Yale University.

IRMA SOONG

828 Harvard Av

Instructor in Oriental Affairs, 1950.

B.A., Yenching University; M.A., Mills College.

SALLY ANNE TAYLOR

1020 Berkeley Av

Instructor in Physical Education for Women, 1950.

B.A., Pomona College; M.A., Stanford University.

LECTURERS

DORIOT ANTHONY

120 S. Oakhurst Drive, Beverly Hills

Visiting Lecturer in Music, 1951.

Graduate, Eastman School of Music; flutist with the Los Angeles Philharmonic Orchestra.

VILLIS L. BURNHAM 1266 Yale Ave.
Lecturer in Engineering Drawing, 1951.
 B.A., Pomona College.

ERNST HEINRICH EIN 461 University Circle
Lecturer in Russian, 1950.
 Graduate, Law School of Tartu University; D. J., Institute of Roman Law, Rome.

ERT GASSMAN 272 S. Doheny Dr., Beverly Hills
Visiting Lecturer in Music, 1952.
 Oboist with the Los Angeles Philharmonic Orchestra.

HARLES B. LAWLER 3560 Padua Ave.
Lecturer in Sculpture, 1949.
 B.A., University of California. Studied under Charles Malfray in Paris, California School of Fine Arts, San Francisco, and Alexander Archipenko.

ELEN M. SMITH 120 W. Third St.
Lecturer in Music, 1949.
 B.A., Pomona College.

GEORGE H. TYLER 140 E. Twelfth St.
Visiting Lecturer in Music, 1952.
 Formerly first trumpet with Los Angeles Philharmonic Orchestra.

MEMBER OF THE CLAREMONT GRADUATE SCHOOL FACULTY
 OFFERING COURSES IN POMONA COLLEGE

AUL HAROLD KOCHER
Professor of English, Claremont Graduate School.
 B.A., Columbia University; M.A., J.D., Ph.D., Stanford University.

¹Absent on leave, first semester, 1952-53.

²Absent on leave, second semester, 1952-53.

³Absent on leave, 1952-53.

FACULTY COMMITTEES 1952 - 1953

First person named is the Committee Chairman

Administration—President, Dean of the Faculty, Walton, Gleason, Woodford, Strathmann, Fowler, Perry.

Admission—Wheaton, Beatty, Crowell, Maple, McCarthy, Walton.

Athletic Council—Strehle, Perry, Fowler, three student representatives, and two alumni representatives.

Pomona College representatives on the Southern California Intercollegiate Athletic Conference—Jaeger, Strehle.

Classification—Maple, Carroll, Hamilton, Gordon Lee.

Courses of Study—Iredell, Bond, Parrish, Maple, Holmes, Fowler, Pierce, Pequegnat, Gleason, Jones.

English—Jordan, Henke, Hamilton, Soong, Fussell.

Library—Gleason, Davies, Bond, Parrish, Weismiller, Hamilton, Benson.

Personnel—Maple, Walton, Phillips, Holmes, Beatty, Stevenson, Nider, and four student representatives selected by the Executive Council of the Associated Students.

Pre-Law—Luther Lee, Bond, Bracher, Darby, Gleason.

Pre-Medical—Pequegnat, Beatty, Fowler, Coltrin, Smith, McCarthy.

Public Events—Iredell, Luther Lee, Scott, Parrish, Smith, Jordan, Stevenson, Wheaton, and three student representatives selected by the Executive Council of the Associated Students.

Religious Activities—Scaff, Scott, Beatty, Shelton, Pierce, Mulhauser, Rankin, Shows, two representatives of Christian Association.

Scholarships and Student Aid—Walton, Baber, Bracher, Smith, Wheaton, Strehle, Beatty.

Student Affairs—Beatty, Jaeger, Walton, Mulhauser, Fowler, Russell, Scaff, and four members of the Executive Council of the Associated Students.

Vocational Counselling and Placement—Beatty, Perry, Walton, Fiske, Leggewie, Ellis, Cawthorne, Wheaton, Gordon Lee, and student members appointed by Associated Men Students and Associated Women Students.

The College

POMONA COLLEGE is an independent, privately endowed, coeducational institution of arts and sciences. Originally established in 1887 to serve its immediate region, the college now enjoys support from every section of the United States.

The College owes its inception to early settlers in Southern California whose previous affiliations led them to the founding of a "Christian College of the New England type." Under the leadership of the Reverend Charles B. Sumner, a devoted and self-sacrificing group were appointed members of the first Board of Trustees by the General Association of Congregational Churches of Southern California. The original trustees were: Henry K. W. Hunt, Nathan W. Blanchard, Anson Brunson, Elwood Cooper, James T. Ford, James H. Harwood, Dexter D. Hill, Theodore C. Hunt, George W. Marston, John K. McLean, Henry A. Palmer, Nath Richards, Charles B. Sheldon, Charles B. Sumner, and Andrew J. Wells.

With the freedom characteristic of Congregational organization, the College soon made itself the servant of a wider Christian fellowship. Today the Board of Trustees is a self-perpetuating body, free from ecclesiastical control but pledged under its charter to maintain the institution as truly Christian, though nonsectarian. Conscious of its heritage, the College gives every encouragement both the study and practice of religion by its students. Within the curriculum the department of religion offers general courses designed for all students, and more specialized work for those desiring to concentrate in religion. Church and chapel services and the work of the Christian Association emphasize the place of religious thought and activity in the life of the campus.

The College was incorporated October 14, 1887, and instruction was begun in September, 1888, in a small rented house in the city of Pomona. The following January an unfinished hotel in Claremont (now Sumner Hall), together with considerable land adjacent, was given to the College and the work was transferred to that place. Although this location was originally regarded as temporary, Claremont later became the permanent home of the College. By that time, however, the name of "Pomona College" had become so definitely fixed to the institution that it was retained, notwithstanding the location.

The College met a need for higher education in Southern California, and after the initial years its growth was constant. The first class was graduated in 1894, at which time the total number of college students was forty-seven. The preparatory department, essential in the beginning, was discontinued in 1910.

Enrollment at Pomona College is restricted to approximately one thousand students, divided equally among the four classes. During the academic year 1951-52, there were enrolled 535 men and 471 women.

Pomona is a liberal arts college, which affords a full academic program in the social sciences, the natural sciences, and the humanities. The curriculum is planned to give a comprehensive understanding of society rather than technical training in highly specialized fields. The College believes that the best preparation for life is liberal education, and it aspires thus to train men and women for professional, business, and civic leadership.

From its foundation the College has emphasized the highest standards of scholarship, both in its program and in the selection of its students. Pomona's devotion to scholarship received national recognition as early as 1914, when the College was awarded a chapter of Phi Beta Kappa. Since 1924 the College has given further impetus to academic achievement by offering an honorary type of instruction which affords opportunities for independent study to outstanding students.

The College recognizes that a primary requisite in the promotion of high scholarship is the intimate contact of students and faculty. Pomona maintains a large faculty in relation to its student body and constantly seeks to promote close relations between students and instructors. During 1952-53 the college will have a faculty member for every ten students enrolled. Elementary courses are divided into sections small enough to provide opportunity for discussion. In their upper division courses students have abundant opportunity for individual attention.

Pomona believes that the highest values of a liberal education can be attained best in a residence college. Through the efforts of its Trustees the College now possesses one of the finest groups of dormitories and dining halls to be found in the country. Approximately 800 students can be accommodated in the dormitories, and all students except the small group staying at home take their meals in the college dining halls.

The College owes the development of the campus and the growth of its financial resources to the generosity of patrons, friends, and alumni. As an independent institution, without assistance from any governmental or church body, Pomona must rely upon gifts for the expansion of its program and for the increase of its endowment, upon which depends the financial strength of the college. From the contributions of her benefactors the total assets of Pomona now surpass \$12,000,000, of which \$5,770,705.54 is in endowment.

THE ASSOCIATED COLLEGES

Pomona College is the original institution in a group of four associated Colleges, of which the other members are Claremont College, Scripps College, and the Claremont Men's College. Although each college is autonomous and independently controlled by its own Board of Trustees, the four institutions cooperate in their academic programs and in use of certain common facilities.

The group, which represents a combination of English and American practices, arose from the desire of Pomona College to maintain for itself the advantages of a small college and at the same time to provide at Claremont an educational opportunity for the increasing numbers of young men and women who at the end of World War I were seeking admission to the College.

Under the leadership of the Pomona trustees, the institution now incorporated as Claremont College was established on October 14, 1925, for the inauguration of the new plan. It assumed responsibility of acting as a central coordinating agency, the direction of graduate instruction for the Associated Colleges, and the foundation of new institutions as they might be required. Claremont College conducts its instructional program under the name of "The Claremont Graduate School," and the presidents of the undergraduate colleges, in addition to their duties in their respective colleges, serve in rotation for two year terms as head of Claremont College with the title of Provost. In addition to its own appointees the faculty of the Claremont Graduate School includes most members of the three undergraduate faculties.

An early objective of the group plan was the establishment of a college for women. In September, 1927, Scripps College, named in honor of Miss Ellen Browning Scripps, whose generosity and vision made it possible, was opened as a residence college for 225 women.

From the beginning the main feature of its curriculum has been a unified sequence of courses in the humanities.

Claremont Men's College, the third undergraduate institution was established in 1946 as a liberal arts college training particularly for business and public administration. The College is developing residence and academic facilities for approximately 300 students.

The four colleges cooperate in their academic programs and thus afford for their students many of the advantages of a university center. The undergraduate colleges open their classes without tuition charges to students in the other undergraduate institutions. Selected courses in the Claremont Graduate School are open to seniors at Pomona, Scripps, and Claremont Men's College.

The colleges maintain a common business office and a joint health service which includes the full time services of a physician and the operation of a thoroughly up-to-date infirmary. A joint library service purchases and catalogues books for the three libraries. Bridges Auditorium, which seats 2600, is administered by Claremont College for the group.

CLAREMONT

One of Pomona's greatest assets is Claremont, the academic community of 6,000 that has grown up around the college. The early settlers were New Englanders and they gave to Claremont an atmosphere unusual on the Pacific Coast.

With the growth of Pomona and the foundation of the other associated colleges the village has come to be a cultural center of unusual significance. Three private preparatory schools are now located in Claremont. Under the auspices of the Congregational Church, Pilgrim Place, a community for retired ministers and missionaries, was founded in 1915. Each winter the village entertains a number of visitors who come to enjoy the climate and the beauty of citrus groves beneath towering, snow-capped mountains.

Although Pomona College students enjoy in Claremont the charm and intimacy of a New England village, they are in no sense isolated from the life of Southern California, for the college is only four miles from Pomona, a city of over 35,000 inhabitants and thirty-five miles from Los Angeles, with which it has hourly bus connections. Claremont is on the main line of the Santa Fe Railway, and the transcontinental lines of the Union Pacific and the Southern Pacific pass through the city of Pomona.

The Campus

POMONA COLLEGE occupies about one hundred and twenty acres, of which sixty are included in Blanchard Park, the gift of Nathan W. Blanchard, about ten in Alumni Athletic Field, and fifty in the campus proper. The College centers on Marston Quadrangle, built and endowed by George W. Marston, 1850-1946, distinguished citizen of San Diego, an original trustee of Pomona and for many years president of the board.

The twenty-six buildings on the campus are heated from a central plant which serves the four colleges.

ADMINISTRATIVE AND GENERAL ACADEMIC BUILDINGS

Try L. Sumner Hall, a hotel which in 1889 became the original building of the college, was removed from its first site in 1902, remodeled for administrative and faculty uses, and named in memory of the wife of Rev. Charles B. Sumner, LL.D., one of the Founders of Pomona College.

Holmes Hall, the first academic building erected by the college in 1893, is a memorial to Cyrus W. Holmes, Jr., of Monson, Massachusetts. Reconstructed in 1916 in conformity with more modern plans for buildings and campus, it is now devoted to citation rooms, departmental offices, and an auditorium seating 750.

The Andrew Carnegie Building, a gift of Mr. Carnegie, which served as the College Library from its construction in 1908 to June, 1932, is being remodeled for use as a classroom and office building.

The Associated Colleges maintain a joint Business Office in Upper Hall, constructed in 1931.

ART AND MUSIC BUILDINGS

Brandt Hall, built in 1914, is devoted to the Department of Art. The upper floor contains studio and work rooms; the lower floor two galleries, one of which was added in 1937.

The Mabel Shaw Bridges Hall of Music, given by Mr. and Mrs. L. Appleton S. Bridges of San Diego in 1915, in memory of their daughter who died while a student at Pomona College, offers

excellent facilities for the study of music. It contains, in addition to private studios, an unusually beautiful auditorium seating 800.

The Mabel Shaw Bridges Auditorium, also the gift of Mr. and Mrs. Appleton S. Bridges in memory of their daughter, was constructed in 1931. It has a seating capacity of 2600, and is administered by Claremont College on behalf of the Associated Colleges.

The Open-Air Theatre, built in 1910, takes advantage of the natural beauty of Blanchard Park.

SCIENCE BUILDINGS

Pearsons Hall of Science, the gift of Dr. D. K. Pearsons in 1896, contains the laboratories and lecture rooms of the Departments of Physics and Mathematics.

The Frank P. Brackett Observatory, the gift of Mr. Llewellyn Bixby, '01, has served the Department of Astronomy since 1908.

The Seaver Laboratory, a separate building in the Observatory area, was completed in 1950. The dome houses the Clara Whitman Shatto Reflector Telescope, and the main floor contains classroom and a library.

Harwood Hall, given in 1915 by Mr. A. P. Harwood, contains lecture rooms and laboratories for the use of the Department of Psychology.

The Mason Hall of Chemistry, the gift of Mr. W. S. Mason in 1922, provides ample facilities for the study of Chemistry, and also houses the Department of Geology.

The Crookshank Hall of Zoology, given in 1922 by Dr. D. Crookshank, is occupied by the Departments of Botany and Zoology.

HONNOLD LIBRARY

The new Honnold Library, which was given by Mr. and Mrs. William L. Honnold to Claremont College for the Associated Colleges, will house the Pomona College Library along with the libraries of Claremont Men's College, the Claremont Graduate School, and a part of the Scripps College Library. With the opening of this splendid building in the autumn of 1952, Pomona and the other Associated Colleges will enjoy one of the finest libraries in the West.

PHYSICAL EDUCATION AND ATHLETIC FACILITIES

The War Memorial Gymnasium, given to the college by students, alumni, trustees, and friends, commemorates the men and women of Pomona College who gave their lives in World War I and World War II. Completed in December, 1950, the Memorial Gymnasium is one of the finest and most beautiful college gymnasiums in the country. The building includes an excellent basketball court with seats for 1200 spectators, a classroom, a memorial library, staff offices, and commodious shower and locker rooms.

The Memorial Training Quarters, constructed in 1922 as a memorial to the men of Pomona College who lost their lives in World War I, has been incorporated as the east wing of the new Memorial Gymnasium. It represents the gift of the parents of one of these men, Sheldon Gerry, '17, supplemented by the gifts of alumni, students, and friends. Among other facilities the Training Quarters contain dressing rooms for swimming for both men and women, and the freshman locker rooms.

A swimming pool, of the standard size for water polo, and fully equipped with modern appliances, is open to both men and women for instruction and recreation throughout the year.

Alumni Field, consisting of about ten acres, has been developed for the alumni into athletic grounds admirably equipped and unsurpassed in the Southwest in beauty of setting. First-class tennis courts, an excellent track, baseball and football fields, also hockey and basketball courts are within the limits of the campus. A beautiful ticket booth, wall and gate to Alumni Field were built in the autumn of 1950, as a gift of the class of 1916.

The William Renwick Gymnasium, named in memory of an early donor to the college, contains the original Pomona College Gymnasium built in 1899, and a larger building first erected as a military barracks in World War I. The two buildings now joined together provide an excellent basketball court and general facilities for the women's department of physical education.

RESIDENCE AND DINING HALLS FOR MEN

The Albert K. Smiley Hall, the first dormitory for men, built in 1908, accommodates seventy-two students and one instructor.

The Eli P. Clark residence unit for men, erected in 1929, includes three dormitories with accommodations for 290 students. Further accommodations are available for both single and mar-

ried men in fifty-two apartments originally given to the college by the United States government for use of veterans.

Frery Dining Hall for Men, given by Mr. George W. Marston in 1929 in memory of Rev. Lucien H. Frery, a Trustee from 1880 to 1903, seats 375 in the main hall and includes three smaller dining rooms for special uses.

RESIDENCE AND DINING HALLS FOR WOMEN

Harwood Court, constructed in 1921 and named in memory of Mrs. Charles E. Harwood, and which also includes Strong Hall, accommodates 180 women.

Florence Carrier Blaisdell Hall, erected in 1936 and named in honor of Mrs. James A. Blaisdell, wife of the fourth President of the College, houses 120 women.

Della Mulock Mudd Hall, which honors the wife of the late Seeley W. Mudd, a Trustee of Pomona, was completed in the spring of 1947. The building has accommodations for 100 women, most of them in single rooms.

The College also maintains three houses, Baldwin House, Bracken House, and Kenyon House, as residences for women.

Beautiful and commodious dining facilities are available for women students. Residents of Harwood Court are served by the Aurelia Squier Harwood Memorial Dining Hall built in 1931.

The Mary McLean Olney Dining Hall, constructed in 1936, has accommodations for 120 students.

Jessie E. Gibson Dining Hall, built in 1949 in honor of the former Dean of Women, serves the students living in Blaisdell Hall and Mudd Hall.

EDMUNDS UNION

The Charles K. Edmunds and Katharine P. Edmunds Student Union, which honors the late fifth President of the College and his wife, provides a social center for all students and an attractive ballroom in which all formal dances are held. This building, made possible by the gifts of many parents supplemented by funds from the Associated Students and the bequest of the late Florence Riley, was built in 1937 and houses student offices, including publications, the graduate manager's office, and the Cooperative Store.

A new east wing to Edmunds Union, which houses the fountain

and sandwich facilities, and also includes a full basement for recreational use, was completed in January, 1951.

HEALTH FACILITIES

Memorial Infirmary, given in 1931 in memory of Colonel Seeley W. Mudd, is administered by Claremont College and is operated entirely for the benefit of students in all the Associated Colleges of Claremont. Twenty-four beds are available. The Infirmary is situated on Amherst Avenue, north of Foothill Boulevard.

The Baxter Medical Building, the gift of Doctor and Mrs. George Baxter to Claremont College, serves the students of the Associated Colleges. It provides an office where the College Physician and a nurse are available for daily consultation and treatment for minor ailments.

OTHER FACILITIES

The President's House at 345 North College Avenue was the gift of Dr. D. K. Pearsons. It was constructed in 1897, and has been the home of all Presidents of the College since that time.

A replica of the original house in Pomona in which the College first opened in September, 1888, was erected on the campus in 1937 through the generosity of an anonymous donor. It contains a historical exhibit set up in recognition of the College's Fiftieth Anniversary, and will become ultimately a museum of Pomoniana. The College operates its own independent deep well water supply, the gift of Edward P. and Mary G. Bosbyshell.

THE CLAREMONT INN

The Claremont Inn, beautifully located on College Avenue opposite the campus since 1906, is the guest house of the colleges and community, and is owned by Pomona College. Parents and friends are invited to use the facilities of the Inn for longer or shorter periods during visits to Claremont. Public and private dining rooms and accommodations for sixty guests under both the American and European plans are provided. Students who do not return home during vacation periods find the Inn a convenient vacation home. The hospitality of the Inn expresses the friendliness of the colleges and the community.

Admission

STUDENTS ARE ADMITTED to Pomona College upon evidence which satisfies the Committee on Admissions that: (1) the applicant possesses the necessary preparation and ability to carry successfully the academic program offered here, and will actually use them to that end; (2) the College, with its programs and traditions, and the applicant, with his capacities, interests and needs, are mutually well suited to each other.

The Committee tends to judge the fitness of an applicant in terms of reasonably definite academic prerequisites but it makes every effort to form judgments on the basis of the total picture rather than in terms of narrowly technical requirements.

Any person interested in preparing for Pomona, or any school official who is responsible for directing the preparatory program of students is invited to call on the Dean of Admissions at any time regarding the acceptability of candidates or for advice on specific programs.

For further information, write to Office of Admissions, Sumner Hall, Pomona College, Claremont, California.

ADMISSION TO FRESHMAN STANDING

The College does not require any particular pattern of secondary school courses, but assumes candidates will have taken a college preparatory course. Under ordinary circumstances they are advised to complete at least three years of satisfactory study in English. Two years of mathematics are advised for all candidates. Those who plan to study mathematics or the physical sciences in college should have at least three years or more, including trigonometry. (See page 81). Foreign language credit is not required for admission but a concentration in many fields a reading knowledge of at least one foreign language is essential. It is much to the advantage of a student to begin the acquisition of this knowledge before entering college and this is strongly advised. Two or three years in social studies and two or three in sciences are also advised. The major attention is given to the quality of preparation rather than to the exact arrangement of subjects.



The Albert K. Smiley Residence Hall for Men



It is normally assumed that candidates will have received a high school diploma. Students from foreign countries or those who are following unusual patterns of preparation may submit other evidences of their readiness to undertake college work.

All freshman candidates are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board. (See page 36 for further information.) This requirement does not lessen the importance of the school record, the personal ratings and personal interviews. The test results will be used in the academic advising of freshmen and replace some of the aptitude tests previously given during the registration period.

It is recommended that applications be filed at the beginning of the senior year in high school. The Scholastic Aptitude Test could be taken either in January or in March and the candidate responsible for registering for this with the College Entrance Board. The regular selection of new students will be made from applications received on or before March 15, provided candidates have taken the Scholastic Aptitude Test in March or earlier.

Applications will be accepted between the dates of March 15 and August 15 from candidates who have already taken the Scholastic Aptitude Test or who plan to take it on May 16 or August 12 but there is no assurance that there will still be vacancies at that time. These applications will be acted upon as promptly as possible.

Whenever there are more applicants than can be accepted the Committee attempts to select the strongest candidates with little regard to the chronological order in which applications are received. In all cases admission is granted subject to evidence of satisfactory physical condition on the part of the candidate.

ADMISSION TO ADVANCED STANDING

In considering applications for advanced standing the College follows the general policy used for freshman candidates. It requires honorable dismissal from the previously attended institution with an average grade of C or better in liberal arts type of courses taken in accredited collegiate institutions, together with recommendations from the proper college officials. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. The transcripts must show the detailed record in all secondary as well as all collegiate institutions attended.

Credit allowed for work taken in other institutions will be determined by the Classification Committee after the candidate has been accepted.

ADMISSION TO SPECIAL CLASSIFICATION

Mature students, particularly those equipped for advanced study, may be admitted as special students to courses for which, by ability and preparation, they may be fitted. Special students are not candidates for a degree, though students admitted to this classification may be accepted later as candidates for a degree.

THREE YEAR PROGRAM FOR JUNIOR COLLEGE GRADUATES

To enable junior college graduates and others who enter with advanced standing to continue their education on the basis of a three-year program leading to the Master's degree as well as the Bachelor's degree, Pomona College and the Claremont Graduate School have planned their offerings so that the closest articulation of undergraduate and graduate study is possible.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from the Massachusetts Institute of Technology after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan may be accepted at M.I.T. without examination if recommended by Pomona. For detailed program see page 82.

APPLICATION PROCEDURE

Application for admission to Pomona College must be made on the form furnished by the college and all credentials must be submitted with the Committee on Admissions. The forms and credentials required are:

1. *Application Form I.* Including \$5.00 fee, which is not refundable. Make checks or money orders payable to Pomona College.
2. *Two Personal Rating Scales, Form II.* Confidential report from the principal or other school official, and by a classmate or teacher, sent by them to the Committee on Admissions.

A Statement of Qualifications. The Committee seeks the most complete possible picture of each candidate and to this end requires a personal, autobiographical statement to supplement the other information. Some or all of the following points may be discussed although the candidate need not consider this an outline to be followed: (1) your preparation or background for college other than that which will be evident from your school record; (2) your major aptitudes and interests either of an academic or non-academic nature; (3) your purposes in going to college; (4) your particular reasons for choosing Pomona College. It is permissible to discuss the paper with others but the writing, both as to ideas and the form in which they are expressed, must be the candidate's. The letter may be typed. The length should not exceed 1,000 words.

Official Transcript of high school record to date. At the time of selection of candidates, work in progress will be considered in fulfillment of requirements, and admission will be granted subject to the filing of a final transcript showing the satisfactory completion of all secondary school work. The transcript form ordinarily used by the school is satisfactory. It should include an interpretation of the grading system. It should not be sent until the first half of the senior year has been completed.

(In addition to the above, the Scholastic Aptitude test of the College Entrance Examination Board must be taken.)

Medical Certificate, signed by a licensed M.D., on a form furnished by the college after admission has been granted provisionally. The college reserves the right to reject students for health reasons.

Room Deposit of \$50 due within thirty days of date of acceptance. This deposit will be held until the student's final semester, at which time it will be credited on the semester fees. No refund of the room deposit will be made if a student withdraws before entrance.

Failure to make this payment results in the cancelling of admission. Candidates on the alternate list for whom places are not provided will have the entire deposit refunded.

In addition to the procedure noted above, a candidate for admission to advanced standing must file an official transcript, or trans-

scripts, of all college work for which he has been previously registered and a statement of honorable dismissal from the institution last attended.

SCHOLASTIC APTITUDE TEST

All candidates for admission to freshman standing are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board and are held responsible for making application to the Board. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. Students who plan to enter in September are advised to take the test in December, January or March. Students who plan to enter in February should take it in May, August or December. Either of the three dates is equally satisfactory.

The College Entrance Examination Board will hold five complete series of examinations for 1952-53. Application to take an examination must be filed three weeks in advance of the examination date. The schedule for the examinations with the dates of registration is as follows:

<i>Examination Date</i>	<i>Regular Registration Closes</i>	<i>Late Registration Closes</i>
December 6, 1952	November 15, 1952	November 29, 1952
January 10, 1953	December 20, 1952	January 3, 1953
March 14, 1953	February 21, 1953	March 7, 1953
May 16, 1953	April 25, 1953	May 9, 1953
August 12, 1953	July 22, 1953	July 29, 1953

Applicants are required to take the Scholastic Aptitude Test only for admission to Pomona College. It is not necessary to take the Achievement Tests.

Copies of the Bulletin of Information may be obtained without charge from the College Entrance Examination Board. The Bulletin contains rules regarding applications, fees and reports; rules for the conduct of the tests; advice to candidates; descriptions of the tests; sample questions; and lists of examination centers.

Candidates should make application by mail to the College Entrance Examination Board. Students who wish to take the examinations in any one of the following western states, territories, and Pacific areas: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming,

Alaska, Hawaii, Australia, and all Pacific islands including Formosa and Japan, should address their inquiries and send their applications to College Entrance Examination Board, P. O. Box 9896, Los Feliz Station, Los Angeles 27, California.

All others should write to College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey.

Application forms will be sent to any teacher or candidate upon request. When ordering the forms candidates must state whether they wish applications for the December, January, March, May or August tests. Application forms for the December tests will be available early in the fall; those for the January tests will be ready for distribution about November 24; those for the March series, January 3; forms for the other two series will be available immediately after the preceding series has been held. A copy of the Bulletin of Information is sent to every candidate requesting an application blank.

Each application to the College Entrance Board should be accompanied by the examination fee of \$6.00.

Candidates are urged to send in their applications and fees to the College Entrance Board at least several weeks before the closing date, since early registration allows time to clear up possible irregularities which might otherwise delay the issue of reports. Under no circumstances will an application be accepted if it is received at the Board office later than one week prior to the date of the examination. No candidate will be permitted to register with the supervisor of an examination center at any time. Only properly registered candidates, holding tickets of admission to the centers at which they present themselves, will be admitted to the tests. Requests for transfer of examination center cannot be considered unless these reach the Board office one week prior to the date of the examination or earlier.

The Board will report the results of the tests to the institutions indicated on the candidates' applications. The colleges will, in turn, notify the candidates of the action taken upon their applications for admission. Candidates will not receive reports upon their tests from the Board.

Expenses

TOTAL PAYMENTS by students cover only approximately 75% of the cost of operating the college. Admission to Pomona in itself, therefore, confers upon each student, in addition to any special awards he may win, an annual scholarship of approximately \$300. This sum is provided by income from endowment funds and by gifts from those interested in furthering the high purpose of the college.

The rising costs of education have greatly increased the average amount spent on each student. The College reserves the right to change any of the following fees at any time should conditions make it necessary.

General Fees

TUITION, including health service, season tickets for Artist Course and Athletic Events	per semester	\$325.00
ASSOCIATED STUDENT DUES	per semester	7.50
GRADUATION FEE		10.00

Residence Fees

ROOM AND BOARD	per semester	\$362.50
(For men living in Smiley Hall and the Veterans' Units the charge is \$322.50 per semester. In Clark Hall a few rooms with fireplace are available for men, for which the charge is \$385.50 per semester. Smiley Hall is not open to freshmen.)		
ROOM DEPOSIT, applicable on payment of bills for final semester of residence. (See pages 35, 40.)		50.00
RESIDENTIAL BREAKAGE DEPOSIT, held until a student withdraws from college. (See page 40.)		10.00

Departmental Fees

For exact fees in science and music see Courses of Instruction.

LABORATORY FEES	\$ 2.00 to 10.00
LABORATORY BREAKAGE DEPOSITS	4.00 to 10.00
FEES FOR APPLIED MUSIC	25.00 to 60.00
PRACTICE FEES, APPLIED MUSIC	2.50 to 15.00

es for Special Privileges

LATE REGISTRATION (See page 73.)	\$2.00 to 10.00
CHANGE OF PROGRAM (See page 73.)	3.00
SPECIAL EXAMINATIONS	2.00

es for Part-time Students

SPECIAL TUITION FOR STUDENTS CARRYING LESS THAN TEN UNITS OF WORK	per unit \$32.50
AUDITOR'S FEE	per course \$10.00

RESIDENCE FOR MEN

The College is equipped with dormitory and dining hall facilities to accommodate most men students and it is expected that men who are actually living at home will live and dine in college halls.

Residential campus privileges are provided only on the basis of an inclusive charge varying according to location of room. The standard charge in Clark Hall is \$362.50 per semester, but a few rooms with fireplace are available at \$385.50. The price for rooms in Smiley Hall and the Veterans' Units is \$322.50 per semester. These charges include necessary furniture, rugs, bed linen and towels, the laundering of the same and the care of rooms. Linens will be changed and beds made in all halls once a week. On the remaining days, men must make their own beds. The only articles to be furnished by the students are blankets, spreads, and study lamps.

RESIDENCE FOR WOMEN

Women students are expected to room in residence halls and to eat at college dining rooms. Freshmen are required to reside in Harwood Court. Students living at home or working for room or board may make special arrangements with the Dean of Women. Harwood Court and the two College Houses have both single and double rooms, as well as suites. Except for a few double rooms, single accommodations are provided in Blaisdell Hall and Dodd Hall. Each room is adequately furnished; the only articles to be provided by the student are linen, blankets, and spread for a single bed. Residential campus privileges are provided on the basis of an inclusive charge of \$362.50 per semester.

RESIDENCE REGULATIONS

The residence privilege does not include the use of rooms during vacation periods. The residence halls are open for new students

the Friday before the opening of the college year and for returning students the day of registration. The residence and boarding privileges end 24 hours after the last examination at the end of each semester for all students except seniors and those asked by the college to remain through Commencement. The residence and dining halls are closed the day after Commencement.

Each student is required to make a deposit of \$50 for a room in the dormitory. This deposit is held by the college until the student's final semester in residence, when it is applied on the college bills for that semester. The deposit will be refunded if notice of withdrawal is given not less than sixty days before the opening of the term for which the student is withdrawing.

A residential breakage fee of \$10 is required from each student from which deductions are made for individual and communal damage to college property, any balance being credited to the student's account on graduation or withdrawal.

The College reserves the right to dismiss from a residence hall without rebate of room rent any student who becomes an undesirable occupant.

The College may dispose of any articles left by students for more than six months.

BILLS

All college bills are due each semester in advance and must be paid by the student at the time of registration. Students wishing to arrange for payment by installments should confer with the Bursar before entering, preferably in the summer preceding registration.

A service charge for deferment will be made as follows:

First semester

Balance payable on or before November 1	\$1.50
Balance payable one-half November 1 and one-half December 1	2.25
Balance payable one-third November 1, one-third December 1, and one-third January 1	3.00

Second semester

Balance payable on or before March 1	1.50
Balance payable one-half March 1, one-half April 1	2.25
Balance payable one-third March 1, one-third April 1, and one-third May 1	3.00

It is expected that payment of installments will be made on or before due dates; failure to do so without the approval of the Bursar will result in an additional service charge.

No refunds are made to those leaving before the end of the semester except that in the case of those leaving before the middle of the semester because of illness one-half of the tuition and laboratory fees are refunded and in the case of those dropping out for good cause within a week of their registration all but \$25.00 is returned. No refund is made on a room payment unless the room is re-rented to someone not then rooming in a college residence hall.

Students with unpaid bills are not given honorable dismissal or graduated. Seniors must settle all college bills and library obligations by four p.m. of the fourth day preceding Commencement if they are to receive their diplomas with their class.

Scholarships and Student Aid

THE COLLEGE offers an extensive scholarship and student aid program, and approximately \$95,000 will be available to Pomona students for scholarships, fellowships, grants-in-aid, and prizes during 1952-53. These funds are derived from endowments for scholarships and student aid, from individual donations from the annual Alumni Fund, and from the general college budget.

Scholarships are awarded to students who achieve outstanding academic records and who need financial assistance to attend college. In making awards the Committee on Scholarships considers the candidate's promise in literary, scientific, or other scholastic ability, qualities of manhood or womanhood, force of character, power to lead and to take an interest in the college community and physical vigor as shown by interest in outdoor sports or in other ways.

Entering students must file scholarship applications, together with the application for admission (\$5.00), by March 15, 1953. Applications should be made on regular scholarship blanks. It is ordinarily understood that candidates for Freshman scholarships will not have attended any other college or university. Candidates need not apply for specific freshman scholarships as each student is considered for any award for which he is eligible.

SCHOLARSHIPS FOR FRESHMEN FOUR-YEAR SCHOLARSHIPS

George F. Baker Four Year Scholarships: Pomona is one of twelve colleges to receive a grant of \$50,000 from the George F. Baker Trust of New York for the purpose of awarding scholarships to outstanding young men. The plan of the Baker Trust is to seek out future leaders of American society and to make it financially possible for them to attend college. Four or more scholarships will be awarded with stipends which may go as high as \$1250 annually according to financial need. Open to men students only.

Alumni Four Year Scholarships: Five or more scholarships will be awarded from the Alumni Scholarship Fund with stipends which may go as high as \$1,000 annually according to financial need. Open to men or women students.

Maria K. Lloyd Scholarship: This four-year scholarship is available to an outstanding candidate who is now a resident and citizen of Greece or Turkey. The amount of the award will be determined by the student's need. It may cover as much as all college expenses for the full four years.

The above scholarships will be renewed for three years if the recipient's performance in college merits a continued award.

The four-year scholarships are awarded not only on the basis of the academic record but also on the all around contribution to the life of the secondary school and community, and the promise of such contribution in college and afterwards. Candidates for these scholarships should be nominated by the principal or headmaster of the secondary school. They are planned primarily for students who will need a substantial amount of financial assistance in order to be able to attend college. They may be awarded, however, to exceptionally promising students who have little if any financial need in which case the stipends will either be nominal or will be withheld entirely. In such an event the number of scholarships will be increased accordingly.

ONE-YEAR SCHOLARSHIPS

The following scholarships are available on a competitive basis to candidates for admission to the freshman class in the year 1953-54. Half of the stipend is available in the first semester and half in the second semester of the freshman year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better.

The Henry E. Storrs and Julia A. Storrs Scholarships: Two scholarships of \$650 each, open to men.

The Margaret Burton Harwood Scholarships: Two scholarships of \$650 each, open to women. Two scholarships of \$650 each, open to both men and women.

The Thomas J. Dowling Scholarship: One award of \$600, open to a man or woman.

The Henry G. Brainerd and Fannie Howard Brainerd Memorial Scholarships: Two awards of \$650 each, open to men and women.

College Scholarships: Twelve scholarships, varying in amount from \$200 to \$650 each, open to both men and women.

California Scholarship Federation Award: A scholarship of \$650 given by Pomona College to a man or woman nominated by the California Scholarship Federation.

Chemistry Contest Scholarship: A scholarship of \$650 is offered by Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Chemical Society. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

The Physics Contest Scholarship: A scholarship of \$650 is offered Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Association of Physics Teachers. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

JUNIOR COLLEGE SCHOLARSHIPS

The following scholarships are available for candidates from junior college, for the year 1953-54, half of the stipend being available in the first semester and half in the second semester of the year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better. Candidates for Junior College scholarships are required to take the College Transfer Test given by the College Entrance Board.

Two-Year Scholarships: One or more, varying in amount from \$300 to \$900.

One-Year Scholarships: Two awards of \$650 each.

Leonard A. and Rose Chudacoff Scholarship: A two-year award available to a man who has completed two years of junior college work and given promise of a distinguished career in the field of science. The amount of the award will cover tuition for the full two years and will also provide whatever additional funds are necessary for college expenses, depending on his needs.

Alpha Gamma Sigma Scholarship: One award of \$650 given by Pomona College to a candidate who is recommended by Alpha Gamma Sigma.

SPECIAL SCHOLARSHIPS

The Charles Harvey Rodi Memorial Scholarship: A scholarship of \$1000 established by Mrs. Lucina Rodi Updegraff, is available annually to a man studying toward a career in medicine. The award is made on the basis of ability and need, and may be available to the same student for more than one year, all at the discretion of the Committee on Scholarships.

The A. L. Hobson Memorial Scholarship: A scholarship of \$550 open to any man student from Ventura County, California, who needs financial assistance to attend college. The recipient may be a member of any class at Pomona.

The Knights Templar Scholarship: An annual scholarship of \$600 provided by the Knights Templar Educational Foundation, Inc., of the Grand Commandery of California. It is awarded in recognition of the qualities of leadership and of manhood or womanhood which make for good citizenship. It is open to California residents of any Pomona class.

The Arthur Noble and Frances W. Noble Scholarship: A scholarship of \$550, endowed by the late Mr. and Mrs. Arthur Noble, is available annually to a student in any class who needs financial assistance.

The Paul Mylrea Holden Scholarship: An annual scholarship of \$500 established by Mrs. Susie Mylrea Holden in memory of her son, is open to students who need financial help. It may be awarded to a member of any class at Pomona.

The Everett S. Olive Orchestral Scholarship: An annual scholarship of \$250 awarded to a qualified student on the basis of musical ability on an orchestral instrument. It is endowed anonymously in tribute to Everett S. Olive, Emeritus Professor of Piano, whose interest has been an important factor in the development of the orchestra. It is normally given to a freshman. The scholarship is awarded on the joint recommendation of the Music Department and the Committee on Scholarships. An audition is normally required.

The Walter H. Parsons and Hazen M. Parsons Memorial Scholarship: A scholarship of \$200 given in memory of Walter H. Parsons, '04, and Hazen M. Parsons, '09, is available annually to a man or woman in any class who needs financial assistance to attend college.

The Donald Houghton Bacon Scholarship: The parents of Donald H. Bacon, who died at the college in 1948, have established in his memory a \$1000 scholarship fund, the income of which provides an annual award to a deserving student who prepared for college at the Tucson, Arizona, High School, and who is recommended by the Superintendent of Schools in Tucson. If in any year no graduate of the Tucson High School is recommended for the award, it may be made to a senior student at Pomona College, who upon recommendation of the faculty is considered the outstanding member of his class with respect to excellence in class work, athletic ability, and general participation in campus activities.

The John P. Evans Scholarship: A scholarship of \$500 available at Pomona College will be awarded annually to a man who has completed two years at Mount San Antonio College. One half of this sum shall be available for college bills in the junior year; the remainder for the senior year. Candidates for this scholarship, who will be nominated by the Director of Mount San Antonio College, must be of outstanding ability and give promise of becoming good students and leaders among their fellows. The candidate selected must meet regular admission requirements and conditions of competition prevailing at Pomona College.

SCHOLARSHIPS FOR MATRICULATED STUDENTS

The scholarships listed below are available during 1952-53 for students who attended the college during 1951-52, and who have satisfied the matriculation requirements. They are not available to entering students. These scholarships are awarded in open competition but normally require a grade point average of approximately 3.0. Half of the stipend is available in the first semester and half in the second semester of the year. The award for the second semester

is made only if the recipient is in good standing and has maintained a scholastic record of B or better. The degree of financial need is taken into account in the awarding of all scholarships. Applications for these scholarships should reach the committee by May 15.

The Frank G. Butler Scholarships: Five scholarships of \$700 each awarded to sophomores, juniors, or seniors who have achieved scholastic distinction.

The Olivia Phelps Stokes Scholarships: Three scholarships of \$650 each

College Scholarships: Twenty scholarships from \$200 to \$900 each depending on financial need.

The Kappa Delta Honor Scholarship: An annual scholarship of \$600 established in 1926 by alumni members of Kappa Delta Fraternity and administered under a special committee, is awarded at the beginning of his senior year to an outstanding all-around man, who shows qualities of character, intellect, leadership, sportsmanship, and proficiency in athletic pursuits. The recipient must have been in residence during all three lower years, and must rank in the highest third of all the men in his class.

The Phi Beta Kappa Scholarship: A scholarship of \$200 endowed by the Pomona Chapter of Phi Beta Kappa is awarded at the beginning of the second semester to a senior who has been in residence for three years at Pomona and who is selected for the high quality of his scholarship and his promise of future distinction. The award is open to both men and women.

The Nu Alpha Phi Memorial Scholarship: A scholarship of \$600 endowed by the members of Nu Alpha Phi Fraternity and awarded to a man at the beginning of his junior year. Selection is made by a special committee on the basis of outstanding character and real financial need, the latter partly determined by records of student employment during the school year. Given in memory of the Fraternity's losses in World War II.

The Flora Sanborn Pitzer Memorial Scholarship: A scholarship of \$500 from The Sanborn-Pitzer Foundation, established by Russell K. Pitzer of the class of 1900 in memory of his wife, is available to a woman student in the sophomore, junior, or senior class who has shown scholarship ability and who requires financial assistance to remain in college.

The Alice M. Sanborn Scholarship: A scholarship of \$500 annually endowed by the late Alice M. Sanborn, is available to a man selected by the Scholarship Committee as a representative student at the college, not necessarily of the highest scholarship standing, but who has high moral character. The candidate shall be selected at the beginning of his junior year, and shall receive the scholarship for both his junior and senior years in college, provided he shall remain, in the opinion of the Scholarship Committee, worthy of continued assistance.

The Malcolm Eversole Memorial Fund: A scholarship providing full tuition for a man in the Junior Class to be nominated to the Scholarship Committee by the President of the College at the end of the nominee's second year in Pomona College. The selection is based not on scholastic rank only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character.

The Llewellyn Bixby Memorial Scholarship: A scholarship of \$500 available annually to a man or woman who has completed the freshman year in Pomona College and who shows proficiency and genuine interest in science. Given by Mrs. Llewellyn Bixby, '01, in memory of her husband.

Andrew Acker Sugg Memorial Scholarship: A scholarship of \$475 available annually to a junior or senior man who shows promise of outstanding work in the field of science. This fund has been established by Mrs. Andrew Acker Sugg in memory of her husband.

The Andrew Fletcher Garst Memorial Scholarship: A sum of \$250 will be awarded annually at the beginning of the senior year to a deserving man or woman student who has benefitted most from his college experience of three years and who has also contributed substantially to the life of the college. The selection of the candidate, whose major should preferably be in music, art, or science will be made by a committee of nine students and the Deans of Men and Women. This award is given annually by friends in memory of Andrew Fletcher Garst, a member of the Class of 1952.

Bertha Lebus Scholarship: A scholarship of \$450 endowed by Miss Bertha Lebus is available annually to a matriculated student attending the college. The recipient must be a person who shows a high degree of promise and who needs financial assistance.

The Associated Men Students Scholarships: The Associated Men Students of Pomona College annually offer the two following awards: (1) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and proficiency in athletics. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year. (2) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and attainment in extracurricular activities. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year.

The Jessie Gibson Scholarship Fund: An Associated Women Students Fund for scholarship awards to members of minority groups who exhibit high qualities of character, leadership and scholarship. The awards will be administered by the A.W.S.

DEPARTMENTAL SCHOLARSHIPS

ART

The Hannah Tempest Scholarships: Two scholarships of \$125 each are awarded annually to a man and a woman studying art, in accordance with conditions laid down by the donor, Mrs. Hannah Tempest Jenkins.

ASTRONOMY

The Shatto Memorial Scholarship: A scholarship of \$250 is provided annually from the income of the Walter O. Shatto and Clara R. Shatto Memorial Funds for a qualified upperclassman or graduate student majoring in the Department of Astronomy, the candidate to be selected on the joint recommendation of the department and the Scholarship Committee.

GEOLOGY

The Richard E. Strehle Memorial Scholarship: A scholarship of \$300 from the income of the Richard E. Strehle fund is awarded annually to a junior or senior man with the physical, mental, and moral qualities desirable in a field geologist. Choice is made near the end of the sophomore or junior year, on nomination by the Geology Department to the Scholarship Committee. The award may be withheld in any year, and additional awards may be made in years when extra income is available.

MATHEMATICS

The J. Carlyle Bryant Scholarship: Established by Mr. and Mrs. George W. Bryant in memory of their son, J. Carlyle Bryant, '45. Available to an outstanding, all-around man in any class at the college, who possesses qualities of character, scholarship, and athletic ability, and who is particularly interested in mathematics. The amount of the scholarship varies from \$500 to \$900, depending on the need of the recipient. If there should not be a properly qualified candidate in mathematics, the scholarship may be awarded to a student in one of the other physical sciences.

MILITARY

The advanced course of the Reserve Officers' Training Corps consists of Military Science III and IV. Students who have completed the basic course (Military Science I and II) or who are accorded equivalent credit because of military or naval service are eligible for enrollment in the advanced course. Students enrolling in the advanced course enter into an agreement to complete the two year course and attend one summer training camp of six weeks. In consideration of this agreement, students receive from the United States Government cash allowances equivalent to scholarship of about \$310.00 a year. All necessary expenses in connection with camp, including transportation to and from the camp, food, housing, uniforms and medical attention are provided by the government.

Advanced course ROTC students whose attainments in military science are outstanding may be designated by the Professor of Military Science and Tactics as "Distinguished Military Students." A number of distinguished



*Those who have seen Marston Quadrangle will ever remember its beauty.
The Auditorium provides opportunity for students to hear the world's foremost artists.*





This Spacious Court, Center of the Men's Campus, Leads to Frary Dining Hall.

Gibson Dining Hall and Blaisdell Residence Hall.





Pearsons Hall of Science

The Edmunds Union is the Center of the Students' Extra-Curricular Life.





Garden of Harwood Court—Residence Hall for Women

Frery Dining Hall for Men with Orozco Fresco



military graduates of Senior ROTC Units may be selected for direct Regular Army appointments.

The number of students admitted to the advanced course is limited by available appropriation and to that number recommended by the college authorities as being well-qualified to pursue the course. The selection of students for enrollment in the advanced course is based upon excellence in military training and suitability for appointment as second lieutenants in the infantry branch of the U. S. Army Officers' Reserve Corps. Students who present evidence of above average records while in military or naval service, who have distinguished themselves in the basic ROTC course of this or other schools will receive special consideration in the selection of those students to be enrolled in the advanced course.

MUSIC

The Kate Condit Memorial Scholarship: A scholarship of \$100, endowed by the late Mr. and Mrs. A. P. Condit, is awarded annually to an outstanding student in the Department of Music.

The William J. Howard Memorial Scholarship Fund: Established by alumni and friends in memory of William J. Howard, '14. A scholarship of \$45 is awarded annually to a student for lessons in applied music.

The Presser Foundation Scholarships: A fund of \$250 is given to the college annually by the Presser Foundation of Philadelphia, for the assistance of music students. Scholarships from this fund are awarded by the Music Department. It is planned for students who are interested in music education and other advanced work in music.

PHYSICS

The Richard P. Edmunds Memorial Fund provides a scholarship of full tuition for an upper division man student (preferably one who has attended Pomona during the first two years) nominated to the Scholarship Committee by the Professor of Physics.

RELIGION

The Claremont Church Scholarship: A scholarship of \$250 to be awarded each year to an upperclass student planning on life-time Christian service or a senior about to enter seminary training. Choice is made in the spring by the Scholarship Committee upon nomination from the Department of Religion in conjunction with the minister and a member of the World Service Committee of the Claremont Church.

FELLOWSHIPS AND SCHOLARSHIPS FOR GRADUATE WORK

The following awards may be made for 1953-54 to graduating seniors if qualified applicants appear. Applications should be in the hands of the Committee on Scholarships by March 15, 1953.

The Henry Martyn Bracken Foundation and the *Emily Robinson Bracken Foundation* provide two or more fellowships for graduate work in the Claremont Graduate School. When in any year a graduating senior does not qualify for the award, the stipend may be given to an undergraduate student in Pomona College.

The C. E. and Bertha M. Harsh Memorial Scholarship Fund in the Claremont Graduate School provides income for scholarship aid to Pomona College graduates. Although the Board of Fellows is empowered to make grants of the income for the assistance of any capable and promising graduates from Pomona College attending the Claremont Graduate School, it is the preference of the donors that first consideration should be given to those who are doing advanced work in the Fine Arts.

The William Lincoln Honnold Foundation provides a fellowship with stipend determined by the committee of award according to individual circumstances. The award is open normally only to graduating Seniors who have done four full years of work in Pomona College, who are rated in the upper half of the graduating class on the basis of their performance during both the junior and senior years, and who wish to continue their studies either at the Claremont Graduate School or elsewhere in America or abroad.

The prime purpose of the fellowship is to promote original and creative achievement in the candidate's chosen field of activity rather than merely to reward faithful classroom work. Preference will be given to candidates preparing for scholarly rather than professional work. The selection will be based not on scholarship only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character. The plans for graduate work are to be made in consultation between the candidate and the Committee on Scholarships, the committee having final authority. At the end of the year, the Honnold Fellow is to make a full report to the Committee on Scholarships covering the character of his work, impressions of the institution in which he has been residing, his plans for the immediate future, and recommendations for the further development or improvement of the fellowship plan.

University of Chicago Law School Scholarship: A scholarship in the School of Law at the University of Chicago will be awarded by the Pomona College Committee on Scholarships. Stipend is normally \$642.00 and is renewable for two years if the student's record is satisfactory.

The Committee on Scholarships also nominates students from Pomona College who wish to apply for awards by other institutions and foundations.

CLAREMONT GRADUATE SCHOOL SCHOLARSHIPS

In addition to the awards for graduating seniors offered through Pomona College, scholarships for graduate work are available at the Claremont Graduate School.

Three Honnold Scholarships, two of \$750 each, and one of \$500, are awarded in the field of Oriental Affairs. General scholarships of \$500 to \$750 each are available for work in the field of the candidate's choice. A few graduate assistantships with a stipend of \$600 and half tuition in the Claremont Graduate School are available through Pomona College and Scripps College.

STUDENT AID

In addition to the scholarship awards, the college makes grants-in-aid available to students doing satisfactory academic work who require financial assistance to continue at Pomona. To this end the income of certain endowed funds is supplemented by a budget appropriation. Such aid is normally given only to students who have completed one year in Pomona College, who are or intend to become candidates for a degree from Pomona College, who maintain a high standard of honor, who are economical in their habits, who are regular in their attendance upon college exercises, and who maintain at least C grade in their scholastic work. Recipients of grants-in-aid are expected to earn part of their college expenses by employment during vacations and term time.

Aid may be withdrawn at any time from students who prove not to have conformed to the conditions.

If a student who has received a grant-in-aid transfers to another institution of comparable cost before graduation the total sum granted him by Pomona College will become a loan, repayable according to the terms applicable to regular student loans.

It is customary to extend loans only instead of grants to students who are in the second semester of the senior year.

All applications for aid should be made to the chairman of the Committee on Scholarships and Student Aid, Sumner Hall, before May 15 for the first semester of the following academic year, and before January 15 for the second semester of the current academic year.

STUDENT AID FUNDS

The income from the following funds is available for student aid:

The Francis Bancroft Memorial Fund of \$1500, given by Mrs. James T. Ford in memory of her father.

The L. H. Barrows Fund of \$2500.

The H. G. Billings Memorial Fund of \$1000.

The Florence G. Bixby Fund of \$5000.

The Hagop Bogigian Fund of \$31,402.

The Sherlock Bristol Memorial Fund of \$400.

The Bessie A. Brown Memorial Fund of \$800, given by Mrs. Fannie Brown.

The Henry Herbert Brown Memorial Fund of \$1000 given by Mrs. Fannie E. Brown in memory of her son.

The Class of 1918 Fund, \$961.

The Charles C. Cragin Memorial Fund of \$5025, given by Mrs. Laura Cragin in memory of her husband, Rev. Charles C. Cragin.

The Agnes K. Crawford Memorial Fund of \$1000, given by David K. Crawford and William Crawford in memory of their mother.

Ebell Club of Pomona Student Aid Fund of \$1000. To help a woman student.

The Elwood Fund of \$2600, given by Mary E. Elwood.

The Ford Fund of \$2500, given by Rev. James T. Ford.

The Margaret Fowler Fund of \$1000.

The Orren A. Gorton Fund of \$5000.

The Emma K. Guild Fund of \$44,887.

The Manette Hand Memorial Fund of \$1500.

The Alfred James Harwood Memorial Fund of \$8000.

The Charles E. Harwood Fund of \$5000.

The Thomas F. Howard Memorial Fund of \$3500, given by Dr. J. C. Mrs. H. G. Brainerd in memory of Mrs. Brainerd's father.

The Mary Marvin Janes Fund of \$679.

The Helen Day Jewell Fund of \$1000.

The Henry L. Kuns Fund of \$2000.

The Jean Loomis Fund of \$2000.

The Howard J. Mills Memorial Fund of \$3000.

The Ontario Congregational Church Fund of \$186, given by the Ontario Congregational Church toward the endowment of a fund.

The Page Fund of \$5000, given by Mrs. Loraine H. Page. (Three thousand dollars of this may at some time be used for other purposes.)

The Arthur Warren Phelps Memorial Fund of \$2000, given by Mrs. C. S. Phelps and Mr. C. A. Phelps in memory of their son and brother.

The Lydia Phelps Memorial Fund of \$4000.

The Pilgrim Church of Pomona Fund, \$2002, given by the Pilgrim Congregational Church of Pomona.

The Pilgrim Church Women's Auxiliary Fund of \$556, given by the Women's Auxiliary of the Pilgrim Congregational Church of Pomona.

The John D. Potter Memorial Fund of \$2000, given by Mrs. S. T. Potter in memory of her husband.

The Anna H. Searing Fund of \$1800.

The Clyde H. Shields Memorial Fund of \$2000, given by R. P. Shields in memory of his oldest son.

The Lucia Glidden Strong Fund of \$911.

The Sweet Memorial Fund of \$2500, given by Harlan P. Sweet in memory of his wife.

The Maria T. Wardwell Fund of \$1000.

The Clara B. Waterman Memorial Fund of \$5000, given by Miss Rosa May Bennett.

The Henry S. West Fund of \$2000.

SPECIAL FUNDS

The Crombie Allen Scholarship Fund of \$1000, half of the income available annually to a graduate of Chaffey Union High School and half to a graduate of Chaffey College of Ontario, California.

The Martha E. Berry Memorial Fund of \$6000, for foreign students.

The Mabel S. Bridges Memorial Fund of \$3500, available for women.

The Alice Paul Harwood Scholarship Fund of \$5000, open to graduates of Chaffey Union High School of Ontario.

The Stella M. King Scholarship and Loan Fund for Women, \$10,000.

The Francis M. Price Fund of \$1000, for children of missionaries.

LOAN FUNDS

The college also administers loan funds by which it is possible to cooperate with the urgent need of students in making available to them amounts sufficient to cover tuition fees. Interest at the rate

of 4% per annum begins on graduation or at the time of leaving the college. Loans from the following funds may be available for which applications should be addressed to the Committee on Scholarships and Student Aid.

General Loan Fund of \$74,485.

The Caroline Phelps Stokes Fund of \$25,000, endowed by the will of Olivia Eggleston Phelps Stokes in memory of her sister, income from which is available for loans.

The Ethan Allen Chase and Augusta Field Chase Fund of \$6538, available for men.

The Ray Loan Fund of \$1561, given by Mrs. E. F. Ray, to provide a means of meeting situations of temporary need.

The David Clark Fund of \$1162.

The Robert C. Denison Memorial Fund of \$581.

The Lucy B. Jencks Memorial Fund of \$419, established by the Claremont Chapter of the D.A.R., available for a senior girl designated by the Dean of Women.

The Edwin C. Norton Memorial Loan Fund of \$1575, available for undergraduate students, or for graduates of the college who wish to pursue advanced work in other institutions.

The C. F. Baker Memorial Loan Fund of \$216, available for undergraduate students, preferably juniors or seniors, in the departments of Botany and Zoology, who are approved by the heads of those departments.

The A. G. McKenna Loan Fund of \$2940, available to graduating seniors for advanced work at the institution of the student's choice.

The Anna Bruce Memorial Loan Fund for Women, of \$530.

The Associated Women Students Loan Fund, administered by the Dean of Women at the request of the Associated Women Students, makes available for women students short term loans for personal emergencies. It is not normally used for loans to meet college bills. Interest at the rate of 4% begins after a period of two years.

The Associated Men Students Loan Fund, established in 1931, is available for loans in small amounts to meet personal emergencies or short-term personal needs of Pomona men. It is not intended to be used to pay college bills. For a special need a loan may be issued on a long-term basis. The interest rate is 4%. The fund is administered by the Dean of Men at the request of the Associated Men Students.

STUDENT EMPLOYMENT

The College endeavors to find employment for students needing to earn part of their expenses. Many are thus helping themselves by various forms of labor such as baby sitting, janitor work, waiting on tables, general house work and gardening.

Applications for aid in securing employment should be addressed to the Director of Placement Service, Sumner Hall.

PRIZES AND AWARDS

GENERAL

The following prizes and awards are available for general accomplishments and for proficiency in the work of the several departments:

The Rena Gurley Archibald High Scholarship Prize: A prize of \$50 to be awarded to that member of the graduating class taking the B.A. course and ranking highest in scholarship was established by the bequest of the late Reverend Andrew W. Archibald, D.D.

The Arvid Pierre Zetterberg Award: From a fund endowed by Mr. and Mrs. A. P. Zetterberg in memory of their son, Lt. Arvid Pierre Zetterberg, an annual award of \$50 is made to the sophomore man who during his freshman year exemplifies the highest qualities of character, scholarship, and interest in manly sports. The award is made on nomination of the Scholarship Committee and is presented at the Opening Convocation in September.

ART

The Rembrandt Club Art Prizes: A first prize of \$25, and a second prize of \$10, are awarded by the Rembrandt Club for excellence in drawing and design, in work presented for the annual student exhibition.

The Rembrandt Club Art History Prize: A prize of \$10 is given by the Rembrandt Club for the best paper presented in the course in History of Art.

ASTRONOMY

The Moncrieff Astronomy Prize: A prize given to the student in the first year course in Astronomy, taken regularly in class, whose interest in the study and proficiency in the observatory work are indicated by the best notebook kept in accordance with the teacher's suggestion. A prize of \$20 is given by Miss Flossie C. Moncrieff, '11.

BIOLOGY

The Vaile Prize: A prize of \$15 to be awarded to an outstanding student in Botany or Zoology was endowed by the late Mr. Charles S. Vaile.

CHEMISTRY

The Stanley D. Wilson Prize: A prize of \$25 endowed by Dr. Stanley Wilson is awarded annually to the student whose independent study research shows greatest promise for creative work.

CHEMISTRY-GEOLOGY

The James A. Lyman Prize: A prize of \$100 awarded at the beginning of the college year to a senior student majoring in chemistry or geology who in the opinion of the chemistry-geology faculty, shows special promise of achievement in research or teaching, or both. Established in memory of I. James A. Lyman, Professor of Chemistry 1909-1926, by his son, Dr. George P. Lyman, '26.

EDUCATION

The Ada May Fitts Education Prize: A prize of \$50 endowed by Mr. Charles T. Fitts in memory of his wife, Ada May Fitts, is awarded annually to a student for excellence in courses in the Department of Education and for unusual promise in the educational field.

ENGLISH

The John Dye Award: From a fund established by Mr. and Mrs. John Thomas Dye in memory of their son, John Thomas Dye, III, who was Lieutenant in the Army Air Corps, is offered an annual award of \$100 to the student who writes the best piece of original writing to appear in a student publication. The award is announced at Commencement time.

The F. S. Jennings Memorial Prizes: Three prizes for men and three prizes for women of \$50, \$40, and \$30, respectively, for excellence in English are available each semester to members of the Freshman class taking English. In the award of these prizes attention is given to the interest shown by the student in improving the quality of his written and spoken English.

GOVERNMENT

The Edward M. Sait Prize: A prize of \$5 for the purchase of a book relating to American or comparative government, or for a membership in the American Political Science Association, is awarded to the student doing the best work in the basic course in government.

The Russell M. Story Prize: A prize of \$5 for the purchase of an appropriate book, or for a student membership in the American Society for Public Administration, is awarded to the student doing the best work in the course in public administration or in state and local government.

The George S. Burgess Prize: A prize of \$5 for the purchase of an appropriate book, or for a subscription to a selected law review is awarded to the student doing the best work in the course in legal history or constitutional law.

INTERNATIONAL RELATIONS

The Cordell Hull Prize: An award of \$50 is offered annually to the student doing the best work in the course in international relations.

student who submits to the committee on International Relations the best essay on a problem relating to the United Nations. Subjects must be cleared with the secretary of the committee on or before April 1, and the essays, between 2500 and 3000 words in length, must be submitted in triplicate on or before May 1. In case no one essay is of outstanding merit, the committee reserves the right either to divide the honors or to make no award.

LATIN

The Mudge Latin Prizes: First and second prizes of \$10 and \$5, respectively, for excellence in Latin are endowed by friends of the College.

LIBRARY

The Eda May Haskell Library Prize: A prize of at least \$15 in the form of a purchase order for books is offered for the best library submitted by a senior student, not necessarily for the largest or most expensive collection but for the most intelligently selected books in one or more fields of the student's interest.

MATHEMATICS

The Llewellyn Bixby Mathematics Prize: A prize of \$10 for excellence in Analytic Geometry and Calculus; open to all students completing both Mathematics 1 or 52 and 65.

MUSIC

The Barbara Sanford Allen Prize: An annual competitive prize of \$50 to be awarded to a student in the department of music, above freshman rank. This award is made possible by the husband and parents of a graduate of the class of 1915 of Pomona College.

PUBLIC SPEAKING

The Kinney Declamation Prizes: A prize declamation contest open to members of the Freshman class occurs early in the second semester. First, second, and third prizes of \$25, \$20, and \$15, respectively, are endowed by Mrs. H. N. Kinney.

The Dole Debate Prizes: A prize debate for lower-division men is held near the close of the second semester. First and second prizes of \$30 and \$20, respectively, established by the late Mr. John H. Dole in memory of his brother, Mr. William B. Dole, are endowed by Mr. Arthur M. Dole, '96.

The Stella King Prizes: The opportunity to compete for prizes totaling \$75 for speeches of their own composition is offered to upper-division students. The judges have the right to distribute the prize money among the contestants as they see fit, or to withhold all awards if they feel warranted in so doing. These prizes were endowed by the late S. H. Wheeler, in memory of Miss Stella King.

RELIGION

The Hager Prize: A prize of \$10 for the best essay on a foreign missionary subject, open to all students, was endowed by the late Mr. and Mrs. C. R. Hager.

General Information

LIBRARY

THE POMONA College Library, housed in the Honnold Library building, contains 130,000 volumes and 168,000 unbound pamphlets. It receives subscriptions to 700 periodicals and maintains bound files of approximately 550, many of which are complete. Especially valuable are the periodical holdings in the field of natural science. The library is a depository for U. S. Government Documents and the publications of the Carnegie Institution.

The following special collections are a part of the general library: the Cook-Baker Biological Library and the Parish Botany Library in Crookshank Hall and the Rancho Santa Ana Botanic Garden building; the James A. Lyman Memorial Library of Chemistry and the Geology Library in Mason Hall; and the Mathematics and Physics Library in Pearsons Hall. Housed in the main building are the Mason California, the Wagner North Pacific Libraries, and the Viola Minor Westergaard and Carnegie Art Collections.

In addition to the Pomona College Library, the Honnold Library also houses the libraries of the Claremont Graduate School, Claremont Men's College, and a part of the library of Scripps College. The main Scripps College Library of approximately 40,000 volumes is housed in the Ella Strong Denison Library. It contains in addition to its general collection the Macpherson Collection of books about women, and the Stephenson Memorial Collection of American History. The library of the Claremont Graduate School, located in Harper Hall, contains approximately 75,000 volumes, including the Oriental Library, the Library of the Americas, and the George Burton Adams Collection of English History.

A staff member is on duty to assist students at all hours while the library is open. Most of the books are on open shelves where students may consult them at all times. With the exception of reference books, periodicals, and rare volumes, books may be borrowed for two weeks. Certain books in great demand for class use are placed on reserve, subject to special circulation rules.

PUBLICATIONS

The stated publications of the College are issued as numbers of the *Pomona College Bulletin*, which is published monthly except July and August. These include: the *Annual Catalog*, the *Report of the President*, and the *News Letter* for Alumni.

LECTURE FOUNDATIONS

The Joseph H. Johnson Foundation, liberally endowed by Miss Ellen B. Scripps, provides an annual income for the purpose of furnishing to the College for a protracted stay and intimate participation in college life notable educators from other institutions. By this means such educators are annually in residence in Pomona College.

The Henry D. Porter Foundation, named in honor of the late Rev. Henry D. Porter, for many years a missionary in China, secures to the institution annually the extended stay of some prominent worker in the field of Christian Missions. The lecturer upon this foundation commonly shares in the regular classroom work related to the history, geography, politics or religion of the region from which he has come.

The Clark Foundation, established by Mr. Arthur O. Clark, makes it possible for the College to offer each year a lecture or course of lectures in the general field of religion.

PUBLIC ASSEMBLIES

On Thursdays at 11 a.m. General Assembly is held for the purpose of hearing visiting lecturers or members of the faculty discuss topics of interest to the whole institution. This assembly period is also used for student body and class meetings.

On five stated occasions throughout the year, including the opening of each semester, College Convocation is held. Full attendance of both faculty and students is expected at these exercises.

RELIGIOUS ACTIVITIES

The four Associated Colleges at Claremont unite in a College Church which holds its services each Sunday morning at eleven o'clock in Bridges Hall of Music. The Church is the coordinating force for religious activities among the colleges. Students partici-

pate in the services and there is a special student choir for the Church.

The College Chapel, which is altogether a service of worship, held every Tuesday morning from 11:00 to 11:25 in Bridges Hall of Music. Both students and faculty participate in the program, which attendance is voluntary.

Various expressions of religious interest and forms of religious activity exist on the Pomona campus: worship, study and discussion groups, campus and community programs of service, and contacts with intercollegiate enterprises. These interests and the sponsoring organizations are united in the Pomona College Christian Association as a central, campus-wide agency to encourage interest in religion and to develop religious activities.

The Association maintains relationships with the national Student Christian Movement and the World Student Christian Federation. Through one of its committees it joins with the College in sponsoring the weekly Chapel service. Under its or the College's auspices, or that of both, certain occasions of special religious emphasis are provided during the course of the academic year: seasonal celebrations, retreats and conferences, visitations to the campus by prominent religious leaders.

Opportunities for Sunday morning worship are also available at the Claremont churches which welcome the participation of students in their activities.

MUSIC

The College cooperates with Scripps College, Claremont Memorial College, and the Claremont Graduate School in the presentation of the Bridges Auditorium of the most distinguished masters in the field of music. Regularly included in the series is the Los Angeles Philharmonic Orchestra, under the direction of Alfred Wallenstein.

For the concerts thus afforded an annual ticket is furnished every full-time student without extra charge.

Under the auspices of the Pomona College Department of Music complimentary public recitals by individual students and members of the faculty and by groups are given frequently throughout the year. These are usually given on Monday evenings.

The College Symphony Orchestra, the Choir, the Band, the Men's

and Women's Glee Clubs, and chamber music groups, afford opportunity for the study and public performance of the finest in ensemble music.

CAMPUS ORGANIZATIONS

The Associated Students. This association coordinates all student activities. Its officers are chosen by the student body from among their own number. All important questions are first considered by the Executive Council, a governing group composed of class presidents and chairmen of other organizations representing various activities of campus interest. These students are responsible not to the organizations which they represent on the Executive Council but to the Executive Council itself.

Associated Men Students and Associated Women Students. These organizations consider and promote the special interests of the men and women respectively.

Class Organizations. Each of the four college classes is organized for the purpose of promoting class social life.

Phi Beta Kappa. The Pomona Chapter of Phi Beta Kappa is the Gamma of California. Upperclassmen "who are of good moral character, who are candidates for the degree of Bachelor of Arts, and who are distinguished for breadth of culture and excellence of scholarship" are eligible to membership in the Phi Beta Kappa society.

Honor Societies. Ghosts; Mortar Board; Gamma Chapter of Alpha Kappa Delta, Sociology Fraternity; California Alpha Chapter of Kappa Mu Epsilon, National Honorary Mathematical Fraternity.

Departmental Organizations. El Circulo Español, Le Cercle Français, German Club, Caduceans, Economics Club.

Musical Organizations. Men's Glee Club; Women's Glee Club; Music Club, Symphony Orchestra, Chamber Music Groups, Band.

Religious Organizations. The College Church of the four Associated Colleges and the Pomona College Christian Association, which is composed of various committees for religious worship, study, and service.

Miscellaneous Organizations. Drama Productions Committee; Masquers and Thespians, in Dramatics; MSS, literary magazine; Orchesis, in Dancing; Camera Club; Ski Club; Women's Recreational Association.

Local Social Fraternities. Alpha Gamma Sigma; Kappa Delta; Kappa Theta Epsilon; Nu Alpha Phi; Phi Delta; Sigma Tau. Each fraternity has a club room in one of the residence halls on the men's campus. Approximately one-third of the men students belong to the fraternities which pledge new members during the sophomore year. There are no sororities on the campus.

STUDENT PUBLICATIONS

The *Student Life* is published twice a week by the student body and is devoted to campus affairs.

The *Metate* is the yearbook published by the Associated Students.

The *Sagehen*, a magazine of humor, appears three times a year.

The *Hand Book*, which contains material designed especially for new students, is issued at the beginning of the year by the Associated Students.

SUPERVISION OF CONDUCT

Pomona College assumes that most of the matters which affect the college are of concern to both faculty and students and believe that the experience and the judgment of both should be taken into account in the management of much of the college life. For this reason a large number of the policy forming committees of the college have both faculty and students as voting members. These committees now include the following: Admissions, Athletic Council, Personnel, Public Events, Religious Activities, Student Affairs and Vocational Counseling and Placement.

Pomona College assumes that its students, having voluntarily enrolled in the college, are in sympathy with its purposes and philosophy, and will abide by its accepted practices. This basic philosophy is that all members of the college community will govern their conduct by standards of good taste and ethical judgment. Any behaviour on or off the campus which may bring dis-

credit to the individual or to the College may result in disciplinary action.

The use or possession of alcoholic liquors of any kind on the campus is prohibited by the college.

The faculty has placed the interpretation and execution of these policies in the hands of the Committee on Student Affairs which consists of the deans and certain faculty members appointed by the President. Under this Committee as a policy-making body functions the College Life Council, composed of six faculty members appointed by the President and nine student members elected partly by the student body and partly by the Executive Council of the Associated Students.

At the present time the College Life Council has been delegated the responsibility for the administration of discipline, for dealing with inter-class rivalry, for supervision of fraternities, for regulations governing the use of automobiles, and for dealing with infringements of academic honesty and honor. It is probable that additional responsibilities will be assigned to the College Life Council from time to time.

The Judiciary Committee of the Associated Women Students and the Judiciary Committee of the Associated Men Students administer regulations concerning conduct in the residence halls on their respective campuses, and, acting together as a joint body, carry out the policies of the College Life Council and act as a court in matters of discipline, except in those which are judged by the deans to involve serious problems of personality adjustment.

Individual or collective student enterprises which use the college name and involve the absence of the participants from the college must receive the official sanction of the Committee on Student Affairs.

AUTOMOBILES

Rules governing the use of automobiles are formulated and administered by the College Life Council. Students maintaining cars in Claremont are subject to the following regulations:

Ownership of the car, together with its license number, must be registered with the office of the Dean of Men or the Dean of Women at the opening of college or within three days after the car is given in Claremont.

Student drivers must at all times, both on and off the campus exercise particular care and consideration for the safety of themselves and others, and must acquaint themselves with the state and local traffic laws and comply with their observance.

Failure to comply with the above regulations shall constitute an offense against the college, the penalty for which may include sequestration and storage of the car at the student's risk and expense for a period not beyond the end of the term in which the offense occurs.

MEDICAL AND PHYSICAL CARE

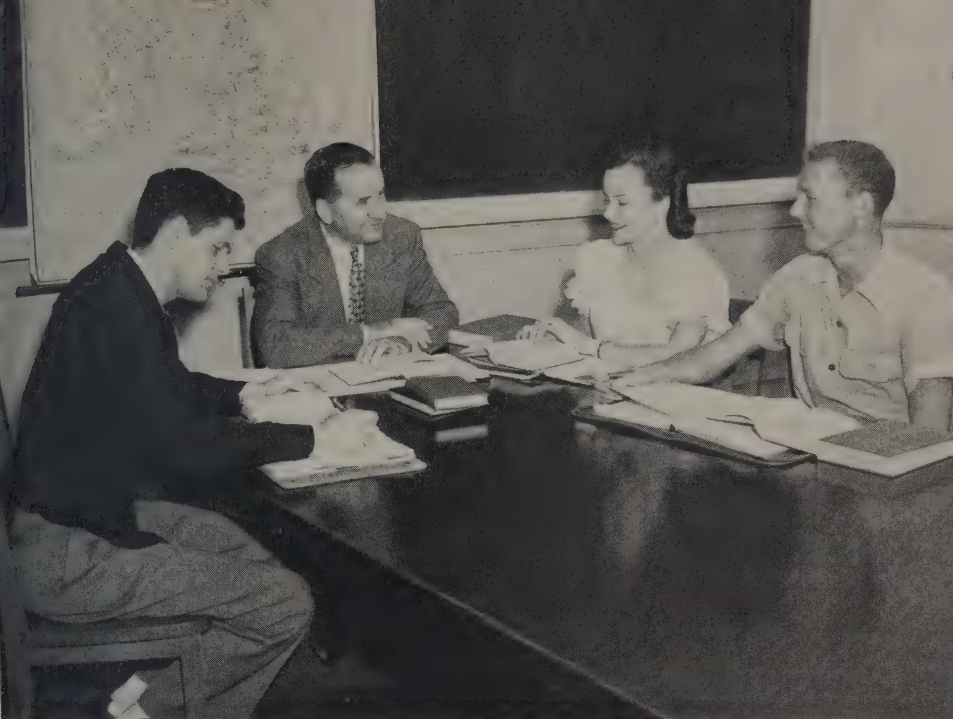
Pomona College, in cooperation with Scripps, Claremont Men's College, and the Claremont Graduate School, engages the full-time services of a physician to care for its students. Dr. Gilbert Coltrin, who has held this position since 1940, is a graduate of Pomona College and the University of Rochester Medical School.

The medical advice of the College Physician is ordinarily available, free of charge, to all students, subject to certain conditions of hours and location of residence. Minor ailments are treated in the Physician's office or at the Infirmary, used for cases requiring nursing and certain types of hospital care. All surgical dressing and medicines are at the expense of the ill or injured as is all medical service in chronic or prolonged illness or in case of accident, or an acute illness beyond ordinary first-aid emergency treatment. The college nurse visits the residence halls each morning in order to see those students reported ill.

The student is entitled to two days each semester at the College Infirmary without charge for room and meals. If illness requires hospitalization for additional days, the charge is five dollars per day. The College, however, reserves the right to discontinue the individual medical service at any time, without previous notice.

The College does not assume responsibility for the complete medical care of all its students, but only in so far as its present facilities will afford. Preventive medicine and campus health functions are stressed in the college medical program.

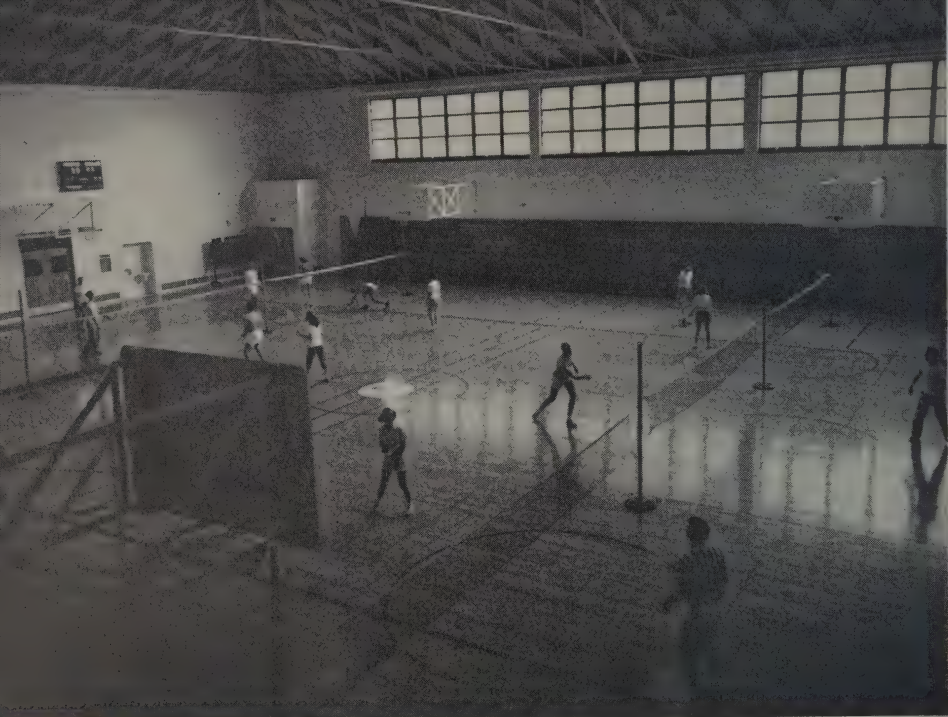
The College has completed arrangements by which its students may purchase group health and accident insurance at special rates and it advises students to avail themselves of this opportunity. Detailed information about this insurance may be secured from the Dean of Students or from the College Physician.



The Pomona College Faculty Gives Its Students Individual Attention

Field Trips to Nearby Mountains and Desert Are an Important Part of Botany Courses





The New Memorial Gymnasium Affords Excellent Athletic Facilities.

Pomona Has Maintained Since 1919 a Voluntary Unit of the ROTC.



For curative treatment, students have ready access to the College Health Service and to the consultants among the leading physicians of Claremont and Pomona. However, complete service is not financed by the college.

When specialists, consultants and special nurses are required, such services will be met by the student. In any illness the student is free to choose his own physician on a private fee basis.

Students are expected to conform to the medical regulations of the college.

PHYSICAL ATTENTION

The physical care of students is a matter of special concern to the college. Every student on entering is given a physical examination under the direction of the College Physician. This examination is required of all incoming students. The medical certificate required of all applicants for admission includes a certificate of recent successful small-pox vaccination and a certificate of a satisfactory tuberculin test, or an x-ray of the chest, performed within the preceding six months. Any student, while in college, may be required to present each year a follow-up certificate of examination for tuberculosis. Regular work in physical education is prescribed throughout the four years, and courses in physiology, and hygiene are given. Supervision is given to athletics throughout the college year.

ATHLETICS

Pomona College and Claremont Men's College unite to conduct a joint program of intercollegiate athletics, under one coaching staff, as a member of the Southern California Intercollegiate Athletic Conference. Our teams, known as the "Sagehens," compete in football, basketball, track and field, baseball, cross country, swimming, golf and tennis.

In addition to the program of intercollegiate sports the College maintains an extensive program of intra-mural sports open to all men students.

The direction and financial management of athletics rest with the Director of Athletics, who has associated with him as an advisory body the Athletic Council, composed of three members of the Pomona Faculty, one member from the Claremont Men's College Faculty, three student members from Pomona and two student members from Claremont. Under the general manager, there is a student manager for each sport.

The college endeavors to safeguard students in the use of physical education facilities, athletic fields, and gymnasiums, and to this end the department has established regulations concerning the use of such facilities, but it is clearly understood that students who use the same do so entirely at their own risk.

PSYCHOLOGICAL CLINIC

The Associated Colleges maintain a Psychological Clinic under the direction of a Clinical Psychologist. The Director of the Clinic, Dr. Evelyn Troup, works in conjunction with the college physician, Dr. Coltrin, and with Dr. Mehl McDowell, a psychiatrist. The Clinic offers remedial instruction, vocational testing and consultation and counseling on personal and emotional problems. Most of the services are open to Pomona students without charge, including one consultation with the psychiatrist. The cost of any additional consultations with the psychiatrist must be met by the student.

VOCATIONAL COUNSELING AND PLACEMENT

Through faculty advisers and the personnel services of the college, students receive assistance in their choice of a career. The college maintains a vocational counseling and placement service for the benefit of alumni and students. Many alumni cooperate with the Director of the Placement Service, in assisting seniors and graduates to find employment.

This service aims to provide reliable occupational information concerning representative business organizations, government agencies, the professions, and other opportunities for employment. The office of the Director of Placement Service is in Room 107, Sumner Hall.

Each year public conferences on modern careers for men and women are held on campus under the sponsorship of the faculty and student committees on vocational counseling and placement and also by individual departments. These round table discussions permit students to hear an organized presentation of twelve or more different vocational fields each year, and to ask questions during the sessions, as well as to meet the distinguished guest speakers at dinner. This series is opened by a special all-student assembly each year on ways of finding one's work in the world.

The Associated Students include in their budget support for the Vocational Information Center which is maintained in the Pomona

College Library, with information on vocations in this country and opportunities for placement abroad and for foreign study. Information on scholarships and fellowships for graduate study is made available to interested students by the Dean of Students and through the Vocational Information Center, as well as by department offices.

Students are given the opportunity to take vocational interest tests, and to consider the results with the Dean of Men or the Dean of Women or with other faculty advisers. Deans and advisers are available throughout the year to discuss with students their choice of academic fields of concentration as well as their vocational and personal goals.

SUMMER SESSION

The Claremont Summer Session is sponsored jointly by the Claremont Graduate School, Pomona College, Scripps College, and Claremont Men's College. A Bulletin describing summer work is issued annually. Requests for information should be addressed to the Director of the Summer Session, Harper Hall, Claremont, California.

The Curriculum

ALTHOUGH THE TRADITIONAL CONTENT of the liberal arts curriculum has been modified in recent years to meet the need developed by social, scientific, and technological change, the modern program in liberal arts and sciences has in common with its predecessors a traditional function: to prepare students for a society which expects of them leadership in diverse roles and offices, humble or great. Today, as in the past, the purpose of Pomona College is to help its students toward a life in which professional achievement is accompanied by personal happiness, cultural balance, and social responsibility. Its program, therefore, includes both courses intended for general education and courses designed for specialized study and preprofessional training.

The immediate objective of general education, as expressed in the course requirements of the College, is to help the student in the development of:

1. Ability to use the English language effectively, in reading, writing, and in speech.
2. Knowledge of scientific thought and method.
3. Understanding of the historical development of our civilization.
4. Understanding of human society, its problems and its institutions.
5. Understanding of the nature and operation of the American economic and political institutions.
6. Appreciation of literature and the fine arts.
7. Appreciation of ethical and spiritual values.

With these purposes in mind, the College requires that certain courses be taken in the Freshman and Sophomore years.

To secure the benefits of intellectual discipline derived from concentrated study, and at the same time, in many instances, to prepare for professional training after graduation, every student upon entering the Sophomore year is required to select a field

concentration in which he will complete not less than twenty-four units of upper-division work during his Junior and Senior years. The field of concentration may be represented by one department or may extend beyond departmental limits to include closely related subjects. For students of outstanding ability and well-defined interests, the field of concentration may be developed into a program of honors study. These requirements and programs of study are described in detail in the following pages.

SUMMARY OF REQUIREMENTS FOR THE DEGREE

Monona College awards only the bachelor of arts degree. Commencement honors are awarded (1) on the basis of the over-all average of the student's work, and of the comprehensive examination, and (2) on the basis of the completion of a program in "Honors Study." These honors are further described on page 88.

Units: One hundred and twenty-six units (semester-hours) of work are required for graduation. A "unit" consists of one recitation or lecture period, or one laboratory period a week for one semester. A recitation or lecture period covers fifty minutes; a laboratory period covers, in general, the time of three such periods. In order to complete the course in eight semesters one must take each semester an average of fifteen units of work exclusive of physical education activities.

Grade Points: In order to graduate, a student must not only earn a certain number of units, but also attain an average of at least C grade in all units for which he has registered, or twice as many grade points as units. An explanation of the grading system will be found on page 71.

Residence: A minimum of four semesters in full-time attendance is normally required for graduation. All students are required to complete the final two semesters in full time attendance unless individual exceptions are made by the Classification Committee.

Lower Division Requirements: All students must satisfy the requirements of distribution in the Lower Division as explained on page 74. These requirements should normally be met in the Freshman and Sophomore years, but their completion may be postponed to the Junior year. Postponement to the Senior year requires the permission of the Classification Committee.

Upper Division Requirements: In the Junior and Senior years all students must undertake a program of concentration leading to a comprehensive examination or its equivalent.

Physical Education Activities: Physical Education Activities must be included in the registration of each student every semester, in accordance with the student's classification, until a maximum of six units has been completed. Freshmen and Sophomores register for two activities each semester,

and Juniors and Seniors one activity. Exemption from this requirement is possible only by permission of the Classification Committee on the recommendation of the College Physician. Transfer students who met the Physical Education requirement of the institution from which they transferred need take only the amount required for their classification.

American History and Institutions: To be eligible for graduation students are required by the laws of the State of California to pass examinations in American history and in American and California institutions, including the provisions and principles of the United States Constitution and principles of California state and local government as established under the Constitution of this State. While courses are helpful in preparing for examinations, it is not possible to satisfy the requirements by the passing any Pomona College course or courses. Examinations to satisfy these requirements will be given semi-annually in September and in the spring on dates which will be announced well in advance. Each candidate will be examined once without fee, but if he fails to pass the first time, re-examination will be given only upon presentation of a receipt from the Business Office for payment of the usual \$2.00 fee for special examinations. Candidates who have failed once, however, must take re-examinations at the times scheduled for the regular examinations. These examinations will be objective in character. This requirement must be met not later than the beginning of the junior year, and preferably as early as possible in the student's undergraduate career. Any student who has not satisfied these requirements by the beginning of his junior year will not be considered to be in good standing until they have been fulfilled. Reading lists for those preparing for examinations are obtainable from the departments of History and Government. Members of those departments will offer a series of public lectures each spring which will be mature interpretations of the subject, they will not in themselves provide all the factual information necessary to pass the examinations. Students failing an examination are advised to take the course in that field before attempting it again.

Foreign Languages: Although the College does not specify a knowledge of a foreign language as a requirement for the degree, several departments include this requirement in their programs of concentration. The student should ascertain the language requirement of whatever program of concentration he is planning to undertake, and, if he is not already prepared to meet it, should include the study of the required language in his Freshman and Sophomore years.

Graduation Fee: Every student expecting to graduate at the end of a given semester must file an application for graduation at the Registrar's Office not later than the beginning of his final semester and must include the graduation fee (\$10.00) with the payment of his other fees at the time of student registration. Failure to comply with these two requirements will automatically exclude a student from graduation that semester.

ACADEMIC REGULATIONS AND PROCEDURE

GRADES AND GRADE POINTS: In order to graduate, a student must earn twice as many grade points as units; that is, an average of at least C grade in all units for which he is registered. Grades and grade points are as follows:

- A (excellent) = 4 grade points per unit.
- B (very good) = 3 grade points per unit.
- C (average) = 2 grade points per unit.
- D (passing) = 1 grade point per unit.
- F (failure) = 0 grade points per unit. May be made up to a D.
- FF (failure) = 0 grade points per unit. May not be made up except by repeating course.
- I (incomplete due to illness)
- W (withdrawn with permission)

All F, FF, and I grades reported by instructors must be accompanied by specific statement in writing of the reason for the grade. In case of an F or I grade, the statement must include a detailed explanation of how the grade can be made up. A copy of this statement is given to the student. All conditions for removing I and F grades must be met within seven weeks of the beginning of classes of the following semester, except that, in certain year courses, the deficiency in the first semester may be removed by successful completion of the work of the second semester, if the instructor so recommends. An F grade cannot be raised above a D. I and F grades not satisfactorily made up within this time limit automatically become FF.

The I mark is given where illness on the part of a student justifies the granting of additional time for the completion of work. It may be changed to whatever grade the student earns. Instructors wishing to give an I grade or a justifiable cause other than illness must first receive permission to do so from the Classification Committee.

A FF grade can be made up only by repeating the course. Where the FF or permanent F grade is incurred in a Physical Education activity, the same course must be repeated when next offered. A student may not continue in any year course other than Physical Education in which he has received a FF or FF grade in the first semester. The making up of work which has received the permanent F or FF grade does not expunge the grade from the record. Credit and grade points are, however, allowed for the repeated work.

The mark W is used where a student has withdrawn from a course in accordance with the provisions outlined under "changes."

Amount of work: The College regulates the amount of work a student may carry as follows:

The normal registration is 15 units of academic work plus Physical Education activities and/or Military Drill. In addition a student may elect for credit for one of the following: Band, Choir, Orchestra, or Play Production.

To register for 17 units of academic work a student must have earned more grade points than the total number of units for which he registered the previous semester; to register for 18 units, 40 more grade points.

To register for less than 12 units of academic work requires the permission of the Classification Committee.

Auditing of Courses: Regularly enrolled students who are paying tuition may, in addition to the courses they are carrying for credit, audit other courses. They should enroll for them through the Registrar's Office. All others must pay the regular auditor's fee, see page 39.

Quality of work: A student is expected to secure each semester twice as many grade points as the total number of units of registration.

Near the end of the first five weeks and near the middle of each semester faculty are required to report all students doing unsatisfactory work for that period preceding the date of the report. In addition to these general reports instructors may make reports at any time concerning individual students who are not in good scholastic standing. Advisers and deans receive such reports and take such steps as are advisable in each individual case.

At the end of each semester a complete report is made on every student. This report becomes a part of the student's record and indicates his standing in the courses for which he has been registered.

The college may at any time require the withdrawal of a student if the quality of his work seems to warrant such action. Decision in every such case is reached by the joint action of the Student Affairs and Classification Committees in consultation with the student's adviser.

Completion of work: To be counted as work completed in the course all papers, reports, drawings, and other assigned exercises must be turned to instructors before the final examination.

Dismissal from Courses: A student who proves unable or unwilling to carry a course satisfactorily may be dropped from it by the Classification Committee upon the recommendation of the instructor at any time later than six weeks from the beginning of the course. The student's class card, with grade of either FF or W for the course and an annotation reporting the fact of his having been dropped, shall be turned in to the Registrar's Office.

Class Attendance: Students are expected to maintain regular attendance at all class appointments in the courses for which they are registered.

While there is no general college requirement, each instructor has the right to establish such specific regulations regarding attendance as may seem best suited to his particular department.

Final Examinations: Seniors are excused from final examinations in the semester in which they take their comprehensive examinations. Final examinations are required of all other students in all subjects save as exceptions are made by action of the Courses of Study Committee.

The schedule of final examinations is prepared by the Courses of Study

committee. No changes of examination dates may be made without the consent of this Committee. Examinations for individual students may be given at other than scheduled times only by consent of the Classification Committee and on the presentation to the instructor of a Business Office receipt for a fee of two dollars (\$2.00), unless this fee is remitted by the committee.

Field Trips: Field trips are looked upon by the faculty as a legitimate part of certain courses. Permission for such trips is secured by instructors from the Courses of Study Committee at the opening of each semester. Instructors certify to the Registrar's Office the names of students participating in these trips.

Faculty Advisers: Each new student is assigned to a faculty adviser, with whom he works during his first year in college. At the end of that time, in the light of the student's interest, an adviser is assigned with whom the student will work during the remainder of his college course. If at any time change is deemed wise it is made through the Dean of Students.

Pre-Registration and Registration: On appointed days shortly after the publication of the catalog in the spring and before Christmas vacation in December all students must pre-register by filling out schedules listing their choice of subjects for the following semester. The fee for any change in this pre-registration is three dollars.

New students pre-register and register on announced days at the opening of each semester.

Registration is completed for all students by the payment of tuition and fees on appointed days at the beginning of each semester.

The fee for late pre-registration or late registration is \$2.00 for the first second day following the appointed days, and \$1.00 additional for every day thereafter to a maximum of \$10.00.

Students are not allowed credit for courses for which they are not formally registered.

Students may not enter courses later than two weeks from the beginning of class work.

Changes in Registration: Upon application to the Registrar's Office and with the approval of his adviser and the instructor concerned, a student wishing to modify his schedule of studies by addition or substitution of courses may do so within two weeks of the beginning of class work. All students except those registering for the first time are required to pay a change fee of three dollars. No change of registration is completed until the student has complied with the procedure established by the Registrar's Office. Students withdrawing from laboratory fee courses within three weeks of the beginning of classes will be refunded the full fee. One-half the full fee will be refunded to those withdrawing in the following three-week period. After six weeks from the beginning of classes no laboratory fees will be refunded.

A student may withdraw from a course within six weeks following the

beginning of class work by following the procedure prescribed by the Registrar's Office. Thereafter, the dropping of a course by a student shall entail for him a grade of FF for the course, except as circumstances may warrant in the judgment of the instructor and the Classification Committee, warrant a grade of W.

Matriculation: Matriculation implies the proven ability to carry college work. To this end the standing of all students is provisional until after they have been in full time attendance for one semester. At that time those new students are matriculated who have shown themselves in accord with the spirit of the College, have carried a minimum of 12 academic units, and have made at least an over-all average of C in all work attempted during their term of residence. For those matriculating at the end of their first semester a public matriculation ceremony is held early in the second semester.

Students failing to matriculate at the end of their first semester of residence may be matriculated at the end of any subsequent semester provided they have met all the above requirements including an over-all average of C in all work attempted during their whole period of residence.

Students are not candidates for a degree until they have matriculated.

The Faculty Regulation on English: In the evaluation of all academic work the quality of English used by the student will be weighed together with the soundness and completeness of his thinking. Faculty members are expected to report to the Faculty Committee on English all students whose use of English is unsatisfactory. On the recommendation of this Committee a student whose English is persistently unacceptable may be required to withdraw from the College at the end of any semester by the joint action of the Student Affairs and Classification Committees. Habitual and flagrant misspelling is considered a deficiency in English to which this regulation applies.

REQUIREMENTS FOR DISTRIBUTION IN THE LOWER DIVISION

All students must satisfy, by the end of the Junior year, the following requirements for distribution in the Lower Division. Normally the distribution requirements shall be met only by the Pomona College courses listed below unless exception is granted by the Classification Committee. Students from other institutions who plan to transfer to advanced standing in Pomona College are advised to scrutinize their programs carefully to be sure they have taken the required work and to consult the Registrar concerning any questions as to the acceptance of credit.

1. *English 1a, 1b.* An Introductory Course. A few students who make exceptionally high scores on the College Board Examination and also on an exercise in composition set by the Department of English are exempted from *English 1a and are enrolled in English 1b in the First Semester.* If they wish, such students may take the *year* course, which is a study of composition and literature.

ure on the college level. Remedial work in English below the college level under the supervision of a special faculty committee.

2. *A year course in a biological science.* Biology 1, Botany 12 and either 5 or 17; Zoology 1 or 11.

3. *A year course in a physical science:* Astronomy 51; Chemistry 1; Zoology 1 and 2; Physics 1; Physics 51.

Note: A student may satisfy the requirement in either Group 2 or Group 3, but not in both, by offering for admission a recommended unit of high school work in one of the sciences listed in the Group from which he wishes to be excused.

4 and 5. *Two year-courses in the social sciences:* History 1a-1b; Economics 1 and 52; Government 51 and 52; Sociology 51 and 52; Education 53; Economics 51 and Government 52. Normally History 1a-1b will be taken as one of the two courses.

Note: Sociology 51 and 52 constitute the integrated year course in sociology for students who expect to take only one year of sociology. For students planning more extensive work in sociology, Sociology 51 and any two higher-numbered semester courses will meet the year course requirement.

6. *A year course in literature, art or music:* This requirement may be met by a course primarily concerned with the appreciation of literature other than with the mastery of language, or by a year course in art or music. Acceptable courses are:

a. English 50 or six units from English 50a, 56, 57, and 58.

b. French 51 and 81, German 53, Latin 57, Spanish 71 and 91.

c. In the classics and in modern European languages, any course, in the original or translation, numbered above 100, except courses in composition and conversation.

d. Any year course of not less than four units in art or music.

7. *A year course in philosophy or religion:* Philosophy 55; 57; Religion 1, 65.

REQUIREMENTS FOR CONCENTRATION IN THE UPPER DIVISION

ALL STUDENTS must make a tentative choice of a major field of concentration during the Freshman year and a definite choice by the end of the Sophomore year. During their first two years students will be expected to complete the basic courses required by the department or departments of their choice.

Each student's program of concentration shall culminate in a final written comprehensive examination over the entire field in which he has concentrated. The student must pass this examination in order to qualify for graduation. In a few departments research projects take the place of the written examination.

The Comprehensive Examinations must be taken at the officially scheduled times. Students who have failed Comprehensive Examinations may request permission to retake them at the opening of the college year and at the end

of each semester. Such applications must be in the hands of the department concerned by September 1, December 1, or April 1. A fee of \$10 will be charged for a re-examination which is taken at other than the times set for a regular comprehensive examination. All students who intend to take the regularly scheduled comprehensive examinations must file an application with the Registrar by December 1 or April 1.

A program of concentration leading to the comprehensive examination must include not less than twenty-four hours and not more than thirty-six hours of work in courses numbered over 100 in the chosen field. These limits apply to that part of the student's program on which the comprehensive examination will be set. For the entire four years of college, not more than a total of fifty-two units in any one department (in Music not more than a total of sixty units) may be counted toward graduation.

A few concentrations have been arranged so as to permit a combination of courses in various departments. In many cases concentration will also be preparation for professional study or other specialized training after graduation.

For concentration in some fields a reading knowledge of at least one modern foreign language is necessary; in many fields a command of two is desirable. It is to the advantage of the student to acquire as much as possible of this reading knowledge before entering college, and whatever additional training is needed should be taken early in his college course.

The requirements for concentration in any department will be found before the list of courses offered by the department. The several programs of concentration in fields consisting of related courses in more than one department follow immediately.

Concentration In Special Fields

[IN ADDITION to concentration programs in the various departments, the following programs in special fields are available:

INTERNATIONAL RELATIONS

THIS PROGRAM is designed for students having an interest in the political, economic and cultural aspects of international relations as well as for those contemplating careers in diplomatic service or foreign commerce. All those electing this area of concentration are required to have a reading and some speaking knowledge of at least one modern foreign language. Some evidence of ability to use the language chosen (French, German, Spanish, Chinese, or Russian) must, except in the case of Chinese, be submitted to the program adviser by the beginning of the junior year, and the language examiner concerned must certify the competence of the student in that language not later than the close of the first semester of the senior year.

Prerequisites: History 1, 55; Government 51 and 52; Economics 51 and 52; and a modern foreign language as indicated above.

Lower-division recommendations: Sociology 51; Psychology 51; Statistics for Social Scientists (Economics 57).

PROGRAM OF CONCENTRATION

A minimum of 30 upper-division units as follows: Modern European History (History 113a, 113b or equivalent), Comparative Government (Government 125, 126), American Foreign Policy (Government 165), International Politics and Organization (Government 167), Money and Banking (Economics 103), International Trade (Economics 115), and 6 additional units to be selected in consultation with the adviser. In making these elections students are urged to consider the relevant courses available in the fields of Sociology, Latin-American Affairs and Oriental Affairs.

For the exceptionally promising student a program of honors study in International Relations can be arranged. The specific requirements beyond the requisite grade point average may be met by six units covering Government 165 and Government 167 and

by six units of advanced reading and directed research culminating in the presentation of a thesis.

Junior Transfers: Students transferring to Pomona at the beginning of the junior year are eligible to concentrate in International Relations provided the prerequisites are met before entrance and can be satisfied in the junior year.

Note: Students intending to do graduate work in International Relations at the University of California (in Berkeley or Los Angeles) should either major in government or at any rate include in their programs 20 appropriate upper division units in government.

FOREIGN AREA AND LANGUAGE CONCENTRATION

EAST ASIA AREA CONCENTRATION

POMONA COLLEGE has one of the best oriental libraries on the Pacific Coast, affording excellent resources for students concentrating on East Asia.

Requirements: A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year of work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Philosophy 126.

Recommendations: It is advisable for a student concentrating in this field to have at least the following introductory courses in certain related fields: Government 51 and 52; History 1; Economics 51 and 52; Sociology 51. These should normally be taken in the freshman and sophomore years. Some students wish to add, in their junior and senior years, Economics 115; Government 167; History 114; Sociology 110.

It is also highly desirable for students studying China intensively to have some work in the Chinese language, three years of which (Oriental Affairs 52, 151, 181) are offered.

Because several of the above required courses are offered only in alternate years, students concentrating in this area should plan their course programs well ahead.

LATIN AMERICAN AFFAIRS

CONCENTRATION in Latin American Affairs is possible in connection with the concentration in International Relations, see page 77. Concentration on Latin America is designed for students looking toward teaching Latin American history, economics, etc.; toward government service in Latin America; toward a business career in Latin America. Students interested in this field should consult with Mr. Herring or Mr. Crowell.

MODERN SOCIAL INSTITUTIONS

For those students whose needs and interests would be better satisfied by a course of study somewhat broader than that in a normal major, Pomona offers a program of concentration in Modern Social Institutions drawing on offerings of several departments. Administered under the chairmanship of Mr. Luther J. Lee, Jr., of the Department of Government, it enables a student to pursue a course of instruction having for its focus the institutional and social problems of the American people. Programs in this field include (1) certain specific courses in the social sciences; (2) in the first semester of the junior or senior year a reading-discussion course emphasizing institutional interrelationships; and (3) in the second semester of the junior or senior year a seminar centering upon American political thought and institutions which is intended to give unity to the concentration. The work in the reading course and the seminar culminates in a paper which is counted as a part of the comprehensive examination.

Students electing this concentration must offer 36 units of upper division work, not less than six nor more than 15 of which should be earned in each of two fields. In each case, however, the following core courses must be included (prerequisites being assumed): History 55 (History of the United States); Economics 109 (Public Finance) *or* 111 (Labor Economics); Education 105 (History of Education: United States) *or* 151 (Introduction to the Philosophy of Education); Religion 142 (Christianity and Modern Society) *or* 160 (Catholicism and Protestantism); Sociology 109 (Marriage and the Family) *or* 112 (The American Community); Government 180 (Readings in Modern Social Institutions) *and* 181 (American Political Ideas and Institutions). In addition, an advanced course (3-6 units) in the history, culture and institutions of an area other than the United States or in American foreign relations is required. In arranging his program of concentration the student, in consultation with his adviser, may select the appropriate number of units from offerings in Economics, Education, English, Government, History, Philosophy, Physical Education, Psychology, Religion, and Sociology.

Pre-Professional Programs

THE academic program of Pomona College furnishes preparation for many of the professions. Indicated below are suggested programs which might be combined with concentrations in certain fields.

PRE-MEDICAL COURSE

CERTAIN SUBJECTS have been designated by the Council on Medical Education of the American Medical Association as minimum requirements for entrance to medical colleges. Many of the leading medical colleges, however, have requirements well beyond the minimum, and are selecting only those who are best prepared and have demonstrated the highest scholastic ability and laudable personal traits. Pre-medical students are advised not to attempt to crowd the minimum requirements into three years of college work but to build, in more leisurely fashion, a broad educational foundation. Breadth of view, culture, and a thorough grounding in the biological and physico-chemical sciences are the objectives of the pre-medical course. It is important to note that these objectives are stressed by all medical colleges.

Below is outlined a curriculum which meets the requirements for graduation from Pomona College and the entrance requirements of most of the medical colleges in the United States. It can readily be modified, as regards both science and non-science courses, to meet the specific requirements of any medical college and the special needs of individuals.

REQUIREMENTS FOR CONCENTRATION

Lower Division Courses: Zoology 1; Chemistry 1, 59; Physics 51; Foreign Language, German preferred.

Upper Division Courses: Zoology 117, 137; Chemistry 106, 111b, and additional units selected from upper division physical and biological science courses for which prerequisites have been met to make a minimum of 24 units.

SUGGESTED COURSES

FRESHMAN YEAR: English 1; Chemistry 1; Zoology 1; History

PHOMORE YEAR: Chemistry 110, 111; German 1; Zoology 117. Electives from literature, art or music; philosophy or religion.

NIOR YEAR: Chemistry 59, 106; Physics 51; German 53. Electives from social sciences.

NIOR YEAR: Zoology 137.

Most medical colleges require a reading knowledge of either French, German or Spanish, with a preference for German. Students planning to study medicine should anticipate these requirements by taking some language in high school with the view toward completing at least one year in college. Also, students will find it advantageous to take trigonometry in high school. In addition students should consult with their adviser to determine the proper time to take the Medical College Admission Test, one of which is an entrance requirement of most medical colleges.

Students interested in pre-nursing should consult the Zoology department.

PRE-ENGINEERING PROGRAM

THE ENGINEERING profession has assumed a more important role in modern society, there has been a growing demand for professional engineers who have, in addition to technical ability and training, a broad understanding of the economic, social, and political forces which are molding modern civilization. Recognition of these requirements for the modern engineer may be found in the liberalized curricula of leading engineering schools.

Students at Pomona College who plan to enter a professional engineering school have an opportunity to obtain an excellent foundation in mathematics and physical science in addition to a well-balanced liberal training. While no professional engineering courses are offered at Pomona, and no engineering degree is granted at Pomona, it is possible in some cases for students to enter a graduate school of engineering after being graduated from Pomona with a concentration program in physical science. Those who plan to continue with engineering training after leaving Pomona should consult with members of the staff in physical science who are acquainted with engineering school requirements.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from M.I.T. after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona.

A pre-engineering concentration may be completed by students who transfer to the Massachusetts Institute of Technology under the Combined Plan after three years at Pomona College and by students who complete four years at Pomona College.

In addition to satisfaction of the Lower Division Distribution requirements of the College, the following Lower Division courses should normally be completed:

Physics 51	Engineering Drawing 40ab
Mathematics 1	Chemistry 1
Mathematics 65	Chemistry 59
Engineering Drawing 7ab	

Satisfaction of the Pomona College concentration requirement for pre-engineering for those students who transfer to MIT at the end of the junior year shall include at least 24 Upper Division units selected from the following courses in consultation with the Faculty advisor. Starred courses shall normally be included.

Mathematics 151a*, 151b	Physics 141a*, 141b
Mathematics 125*	Physics 142a*, 142b
Mathematics 185	Physics 153
Physics 110*	Physics 154
Physics 113a*, 113b	Physics 155

Students planning MIT programs in specialized fields such as chemical engineering, architecture, food technology, and city planning will approximate the above requirements on a unit basis but with substitution of more suitable courses where deemed advisable after consultation with the Faculty advisor.

Those students concentrating in pre-engineering and who plan

graduate after four years at Pomona College shall complete 36 units of Upper Division courses selected from the above list and from the additional list below:

Mathematics 118

Physics 156

Mathematics 119

Physics 191

Mathematics 210

PRE-LAW PROGRAM

ADEQUATE PREPARATION for the study and practice of law requires the completion of an undergraduate program in the liberal arts leading to the baccalaureate degree. Concentration in government, economics, or history is recommended though not to the exclusion of appropriate courses in other fields.

Students intending to attend a law school following graduation should keep in mind that the best preparation for such professional study is a thorough education in the liberal arts. Lawyers and law teachers agree that the ability to communicate, the ability to write and speak with clarity and precision, is of paramount importance. A broad foundation in government, economics, and history is essential; accordingly if the student concentrates in one of these he should be sure to supplement his choice with numerous courses in both of the other fields. Particularly recommended are: introduction to law, constitutional law, American history, expository writing, accounting, English history, public finance, money and banking, corporation finance, political philosophy, logic, and psychology.

Several law schools have made careful studies and recommendations regarding pre-law school education. These should be consulted through one of the advisors serving on the Pre-Law Committee. He should also be consulted regarding the Law School Admission Test which is administered every year by the Pre-Law Committee and which is required by practically every law school in the United States.

PRE-THEOLOGICAL TRAINING

STUDENTS PLANNING to prepare themselves for Seminary or Divinity School training, with a view to entering the parish ministry or college teaching in religion, are advised to secure a well-rounded college education. They could most profitably fulfill their requirements for concentration in one of the following departments: Eng-

lish, History, Philosophy, Psychology, Religion, or Sociology; or in the trans-departmental program in Modern Social Institutions. In any event, the total program for such students should include all of the following as a minimum breadth of preparation: Four semester courses in English (composition and literature); four semester courses in foreign language; two semester courses in philosophy; two semester courses in natural science; six semester courses in social science, including at least two courses in history, one in economics, one in sociology, and one in social psychology; and six semester courses in religion, including Religion 1, 2 and 65. It is also recommended that such students, regardless of field of concentration, consult as early as possible with a member of the Department of Religion with respect to the broad outlines of their contemplated undergraduate programs.

Students planning to prepare themselves for Seminary or Divinity School training, with a view to entering the field of religious education, are urged to concentrate in religion in their undergraduate studies.

PRE-JOURNALISM TRAINING

ON THE RECOMMENDATION of graduate schools of journalism and of distinguished journalists, students planning a career in journalism are advised to concentrate in any principal field of study, to secure a broad and liberal education, and to improve their mastery of the art of writing. Courses in the social sciences, literature, the arts, and foreign languages are strongly recommended. Study in the natural sciences is often desirable, and for some kinds of journalistic work concentration in one of the sciences is advisable. General training in accurate observation and reporting is an important part of a writing courses: English 1, 63, 64, 111, 151.

TEACHING AND EDUCATIONAL ADMINISTRATION

In California every public school teacher must have a certificate. This is issued by the county in which the teacher is employed upon presentation of a credential granted by the State Board of Education.

California requires students who wish a secondary credential to complete a bachelor's degree and one year of graduate work. While California permits the fulfillment of elementary credential require-

ents in the usual four-year undergraduate program, several California colleges and universities consider a graduate program as desirable for elementary as well as secondary teachers. Pomona College is one of these institutions and its elementary credential program is, therefore, organized on a five year plan. The fifth year may be taken at the Claremont Graduate School (one of the Associated Colleges at Claremont) which is authorized to recommend candidates for most of the general and a few of the special teaching credentials, or at any other college accredited by the State for teacher education. (Appropriate program planning well in advance will permit the completion of the elementary credential requirements with one summer and one semester of graduate work.)

For the *secondary* credential, California requires collegiate preparation in two fields commonly taught in the secondary schools: a "teaching major" representing 36 units and a "teaching minor" representing 20 units. These two fields must be selected from the following: social studies, life sciences, physical sciences, English, speech, language arts, foreign language, mathematics, and health education; or from the special fields of agriculture, art, business education, homemaking, industrial arts, librarianship, music, and physical education. Students majoring in areas not offered in secondary school curricula must present two "teaching minors." Thus, most prospective secondary school teachers will concentrate at Pomona College in the area or areas they expect to teach.

Students preparing for the *kindergarten-primary* or *elementary* credential are not required to present a specific teaching major. The concentration in education is especially designed to serve prospective elementary teachers, but several other concentrations are acceptable such as, psychology, art, music, physical education. The program for concentration in education is described on page 113.

Inasmuch as requirements vary considerably for different credentials, and for the various graduate schools of education, students who expect to enter the profession of teaching either in California or elsewhere should consult the Education Department before registration concerning these requirements.

PRE-LIBRARY TRAINING

BROAD GENERAL TRAINING and specialized knowledge in a subject field are essentials for students planning to become librarians. The ability to use the typewriter with accuracy and speed, and a reading

knowledge of at least two modern foreign languages are usual prerequisites to admission to a library school. All librarians will find a knowledge of statistical methods useful. Those who intend to go into public library work ought to have an understanding of the organization and problems of government, municipal government particularly, while those aiming at the college and university field must have a good background in the history and theories of higher education. Students expecting to take up public school library work in California are required to complete nine hours of education. Although it is not a prerequisite, actual experience in library is a distinct advantage.

While concentration in pre-library training is not offered, students looking forward to work in this field are strongly recommended to take the following courses: English 101 or 103, 104; History 113 or 103 or 107; six hours of advanced work in Philosophy, Psychology, or Foreign Languages. Other recommended courses include Education 104, Psychology 107, Art 5, Economics 57, Philosophy 55, Comparative Literature 181.

SOCIOLOGY

SOCIAL WORK. Students who plan to follow social work as a profession should attend a graduate school of social work. The expansion of social services in recent years has created such a heavy demand for social workers that in a few limited fields college graduates are accepted without graduate training, but they cannot expect to be advanced to the higher administrative positions.

The best undergraduate training for students expecting to enter graduate schools of social work is a broad liberal arts education with special emphasis upon the social sciences such as the sociology concentration provides. Introductory statistics and psychology should be included, also Economics 111 and Government 103 will be found useful. Those planning to work in the Pacific Southwest should learn to speak Spanish.

SOCIAL RESEARCH. There is considerable demand for research workers in government agencies—federal, state, and local—as well as in private foundations. Usually at least a master's degree is required, including a knowledge of statistical method. The regular undergraduate concentration in sociology will prepare one adequately for entrance into graduate school, for which there are quite

number of scholarships and fellowships available for outstanding students.

TEACHING. Students preparing to teach sociology should follow the regular sociology concentration. A master's degree is usually essential for teaching in high schools and junior colleges, and a doctor's degree for teaching in colleges and universities. Graduate scholarships, fellowships, and teaching assistantships are available at a good many universities for outstanding students.

Honors Study

Honors study is aimed at a deeper and more scholarly grasp of the student's chosen field than is customary; it is also aimed at broadening his intellectual life by the discovery and exploration of topics relevant to the special subject of inquiry. Students who show capacity and the inclination for more than average intellectual achievement may be permitted during their Junior and Senior years to enroll for honors study.

An honors program frees the student's energies by allowing him through a flexible use of instruction and courses of study, to spend a considerable portion of his time in independent study. Released from as much academic routine as his instructors may approve, the honors candidate thus assumes responsibility for a more profound and wider knowledge than is expected of the ordinary student. He will be admitted to honors status only upon the basis of a record which shows promise of competency to carry on work of high quality; he will be continued only if he exercises initiative and self-direction, places scholarship consistently first among his interests, and maintains a high standard of scholarship in his honors program as well as in his other work.

CONDUCT OF PROGRAMS

General administration of honors work is vested in the Courses and Study Committee, which reviews the programs of honors study planned by departments, divisions, or inter-divisional committees and administers the faculty regulations pertaining to them.

Eligibility: A minimum academic grade-point average of 3.0 is ordinarily a requirement for enrollment in honors study. Aside from this requirement, the eligibility of a student for honors status is determined by the department or division in which he will work.

Hours: The number of hours allotted to honors study must be not less than twelve and not more than eighteen. Within the limit of these hours a student may be excused from formal classes. The method of honors study varies in the divisions: it may be carried on in seminar or laboratory projects, or it may consist of independent study or creative work.

The general requirement limiting to a total of fifty-two units of work which may be taken in one department applies also to honors

ograms. The comprehensive examination in an honors program, however, may cover a greater area than does the Senior comprehensive examination required of all students.

Application: Application for enrollment should normally be made at the end of the Sophomore year. The application form, obtainable at the Registrar's office, must include a statement of the program which the applicant intends to follow and must be approved by the faculty member in charge of the program. For detailed information concerning divisional and departmental programs the student should consult members of the department or division in which he would like to undertake honors study.

Withdrawal: A student may withdraw from honors status at his own request with the approval of the division concerned. In case the performance of a student falls below a standard of high quality either in his honors work or in his courses, he may be withdrawn from honors status either by the division or by the Courses of Study Committee.

Examinations: Evidence of the success of the student in his honors work is measured by written and oral examinations administered toward the close of the Senior year. Normally all or part of the Senior comprehensive examination in a field of study will form part of the honors examination in that field. With regard to his ordinary courses the student is subject to the requirements normally pertaining to them. He may be exempted at the discretion of the instructors concerned from taking course examinations within the field of his honors program.

A student's performance in his honors examination and in any other work required for the completion of his honors program is judged by the department or division in accordance with procedures approved by the division, or, in some instances, by an inter-divisional committee with the approval of the Courses of Study Committee. A student who has maintained in all his work a grade-point average of 3.0 and who has met successfully all the requirements of his program of honors study will be graduated with a notation of that accomplishment. He will be eligible also for general commencement honors described below. A student who fails to meet the standards of his honors program but who in his honors

hours completes work worthy of credit will be recommended to the Courses of Study Committee for graduation in course (*rite*).

COMMENCEMENT HONORS

Pomona College awards the distinctions *cum laude*, *magna cum laude*, and *summa cum laude* to graduating seniors who have distinguished themselves in the over-all average of their work and in the senior comprehensive examination.

GRADUATE WORK IN THE CLAREMONT GRADUATE SCHOOL

Graduate work in history, oriental affairs, Latin America, political economy, psychology, literature, philosophy, the biological and physical sciences, and the fine arts and music, along with professional work in public school education and psychology, conducted by the Claremont Graduate School, whose faculty includes members of the staffs of Pomona College, Scripps College and Claremont Men's College, as well as its own appointees. A catalog will be furnished upon request to the Dean of the Claremont Graduate School, Harper Hall, Claremont, California.

GRADUATE RECORD EXAMINATION

MANY OUTSTANDING graduate or professional schools require request that applicants for admission, as well as for fellowships and scholarships, take the Graduate Record Examination administered by Educational Testing Services, the national academic testing organization. The Graduate Record Examination tests general knowledge in the fields of study covered by the Pomona College curriculum and does not require special preparation. Students who intend to enter graduate or professional schools are advised to write early in their senior year directly to the Educational Testing Service, Box 9896, Los Feliz Station, Los Angeles 27, California.

Courses of Instruction

ELEMENTARY courses numbered below 50 are designed primarily for the freshman year. Courses numbered 50 to 99 are either those which follow the lower course or are the more advanced beginning courses. Courses numbered over 100 are for juniors and seniors and may not be entered by students without previous work in the same field, except by written permission of instructors. Courses numbered NC carry no academic credit. In some departments a definite sequence of courses must be followed. The hyphen in a course number designates that credit will not be allowed for only one semester of the year course. When course numbers are connected by a comma, independent credit is given for the work of the first semester. Entrance to the second semester is by permission of the instructor.

Any course may be withdrawn if the enrollment is less than five. Except by special permission, credit for only one unit of work in a department is not allowed.

COURSES IN THE ASSOCIATED COLLEGES

Following the departmental offerings of Pomona College are listed certain courses in Scripps College and Claremont Men's College open to Pomona sophomores, juniors and seniors under approved conditions. Normally only those courses so listed are open to Pomona College students. It should be noted that most of the Scripps College courses are year courses and consequently credit cannot be allowed for only one semester. To enroll in courses other than those listed, students must first obtain a permission slip from the chairman of the corresponding department at Pomona. Each regular student in residence in Pomona College shall, however, elect not less than half of his registration each academic year from courses in Pomona College. Normally freshmen will take their entire programs of study in the college of their residence. In a few departments involving the use of physical equipment and laboratory space, such as art and the sciences, it is necessary to impose limits on the exchange privileges.

Certain graduate courses in the Claremont Graduate School are also open to Pomona seniors who are concentrating in the fields

in which the courses are offered. Permission must be secured from the chairman of the department in which the senior is concentrating and from the instructor giving the course.

Where a course in Scripps, Claremont Men's College, or the Graduate School duplicates the material of a Pomona course, credit will not be given for both.

DIVISIONS

The courses in the Pomona College curriculum are arranged in three divisions as follows:

DIVISION I [*Humanities*] Art, Chinese, Comparative Literature, English, French, German, Greek, Italian, Latin, Music, Philosophy, Russian, Speech and Dramatics, Spanish

DIVISION II [*Natural Sciences*] Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Military Science, Physics, Psychology, Zoology

DIVISION III [*Social Sciences*] Economics, Education, Geography, Government, History, Oriental Affairs, Physical Education, Religion, Sociology

Art

Three types of concentration are open to students of art within the department: Painting (including Drawing and Design), Sculpture, and Art History. Specialization may be determined in the second year, but correlation between the practice of the two and three dimensional arts and historical and aesthetic study is maintained.

A sense of design and an appreciation of and ability to render form must be exhibited in the basic courses as the foundation for further specialization. The student will be expected to present his work in the Department Exhibition at the end of each year. A comprehensive examination is required of all candidates for the Bachelor of Arts degree.

For each unit of credit in Applied Art, there is required a minimum of one hour of assigned reading and two hours of studio work per week. Students are urged to prolong these periods when other work permits.

The total number of hours of Applied Art accepted toward graduation is 32, so distributed as not to exceed 16 hours in courses numbered under 100. In courses where lecture and laboratory work are combined, the work is counted half theory and half applied.

CONCENTRATION REQUIREMENTS

In addition to the required courses listed in the concentrations described below, sufficient courses to complete a total of 24 units of upper division work

re to be chosen from Upper Division Electives with the consent of the chairman of the department.

PAINTING

Lower Division Requirements: Art 3, 9, 51, 61.

Upper Division Requirements: Art 113a or b, 120, 185.

Upper Division Electives: Art 105, 178, 185, or Scripps II-121, II-122, II-123, II-130, II-141.

SCULPTURE

Lower Division Requirements: Art 3, 9, 51, 65.

Upper Division Requirements: Art 113a or b, 162.

Upper Division Electives: Art 105, 120, 178, 185, or Scripps II-121, II-122, II-123, II-130, II-141.

ART HISTORY

Lower Division Requirements: History 1, Art 3, 9, 51.

Upper Division Requirements: Art 113a and b, 178.

Upper Division Electives: Art 105, 110, 112, 120, or Scripps II-121, II-122, II-123, II-130, II-141.

SPECIAL PROGRAM

WITH APPLIED ART TAKEN AT SCRIPPS COLLEGE

Lower Division Requirements: History 1, Art 51, Art II-2, and one of the following: Art II-21, II-22, II-23 or II-30.

Upper Division Requirements: 6 units of upper division European or Oriental History, 9 units of Art History at Pomona College, 18 units of Applied Art at Scripps College.

3b. DESIGN AND DRAWING. *Mr. Grant.* A basic course investigating the fundamentals of design as applied to painting and drawing. Tempera and casein will be the primary mediums for class work. Two units. Two sections. *W, 10-12; MW, 1:15-3:15.*

9b. SCULPTURE. *Mr. Lawler.* A basic course in sculpture, comprising a study of the nature of form. Forms, both abstract and realistic, will be constructed in a variety of media. 2 units. Two sections. *TTh, 1:15-3:05; Th, 3:15-5:05*

5a-51b. HISTORY OF ART. *Mr. Slive.* A study of the historical development of art with special attention to an analysis of the works examined. First semester: From the prehistoric period through the Gothic era; second semester: From the Renaissance to the contemporary scene. This course or its equivalent is normally a prerequisite for advanced courses in the history of art. 3 units. *MWF, 11.*

5a, 55b. ANCIENT ART AND ARCHAEOLOGY. *Mr. Carroll.* A survey of the arts of Greece and Rome, in reference to the life of both countries and to neighboring civilizations (Egyptian, Near Eastern, Italic, Etruscan, etc.). The first semester will cover Greece, from the prehistoric Minoan-Mycenean

culture to Alexander the Great. Hellenistic Greece, Rome and the Roman World are reserved for the second semester. 3 units. *MWF, 10.*

61a, 61b. FIGURE DRAWING AND GRAPHIC DESIGN. *Mr. Grant.* The rendering of form with emphasis on the development of the student's drawing ability. 2 units. *TTh, 9-11.*

65a-65b. ADVANCED SCULPTURE. *Mr. Lawler.* Continuing study of the nature of form. Work from the model, modeling in relief. Consideration of sculptural techniques and materials. 2 units. Two sections. *TTh, 1:15-3:15; 3:15-5:05.*

105a, 105b. ADVANCED FIGURE DRAWING AND GRAPHIC DESIGN. *Mr. Grant.* 2 units. *TTh, 9-11.*

110a, 110b. MEDIEVAL ART. *Mr. Schardt.* First semester: Early Christian and Byzantine art, 3rd century to 7th century; Carolingian Renaissance, 8th and 9th centuries; Romanesque art, 950 to 1150. Second semester: Early Gothic, 1150 to 1200; Hohenstaufen art, 1150 to 1250; High Gothic, 13th and 14th century; Late Gothic in the North, 15th century. 3 units. *TThS, 8.*

112a, 112b. RENAISSANCE AND BAROQUE ART. *Mr. Schardt.* A study of architecture, sculpture, painting and applied art from the end of the 14th century to the middle of the 18th century. 3 units. *MWF, 11.* (Omitted in 1952-53)

113a, 113b. ART FROM 1700. *Mr. Slive.* A study of the principal trends and individual masters in art from the rococo period to the present day. First semester: From Watteau to Delacroix; second semester: From Daumier to the present. 3 units. *TThS, 10.*

120a, 120b. PAINTING. *Mr. Grant.* Practice in still life, landscape and figure painting investigating various techniques and mediums. 2 units. *T or 1:15-4:05 and arranged.*

162a-162b. CREATIVE SCULPTURE. *Mr. Lawler.* A course open only to advanced students of ability for the development of original problems in various media. (May be repeated.) 2 units. Two sections. *TTh, 1:15-3:15; TTh, 3:15-5:05.*

178a, 178b. PROBLEMS IN THE HISTORY OF ART. *Mr. Slive.* The study of a particular artist, period, school or movement in art or art theory. Offered primarily for majors. 3 units. Arranged.

185a, 185b. PROBLEMS IN APPLIED ART. *Mr. Grant.* Opportunity is given for the pursuit of individual projects in the graphic arts to suit the interest and ability of the student. (May be repeated.) 1 to 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

II-2. FUNDAMENTALS OF DRAWING AND DESIGN. *Staff.* Year course. Offered only by special permission. *MWF, 1:15-4:05.*

- [21. BEGINNING PAINTING. Year course. Prerequisite II-2 or its equivalent. *TTh, 1:15-4:05.*
- [22. BEGINNING WEAVING. *Mrs. Stewart.* Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05.*
- [23. BEGINNING CERAMICS. *Mr. Petterson.* Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05.*
- [30. BEGINNING SCULPTURE. *Mr. Stewart.* Year course. Prerequisite II-2 or its equivalent and permission of instructor. *MWF, 1:15-4:05.*
- [121. ADVANCED PAINTING. *Mr. McFee.* Year course. Prerequisite II-2 or equivalent. *MWF, 1:15-4:05.*
- [122. WEAVING. *Mrs. Stewart.* Year course. Prerequisite II-2 or equivalent. *MWF, 1:15-4:05.*
- [123. CERAMICS. *Mr. Petterson.* Year course. May be repeated for credit. Prerequisite II-2 or equivalent. *TTh, 1:15-4:05.*
- [130. SCULPTURE. *Mr. Stewart.* Year course. May be repeated for credit. Prerequisite II-2 or equivalent and permission of instructor. *MWF, 1:15-4:05.*
- [141. ARCHITECTURAL DESIGN AND PLANNING. *Mr. Whitney Smith.* Year course. Prerequisite II-2 or equivalent. By permission of instructor. *TTh, 1:15-4:05* and arranged hour.
- [170. PRINTING. *Mr. Foster.* One or two year course. *TTh, 1:15-4:05.* Registration by permission of the instructor.

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Graduate work in the history of art and architecture and in applied art is available under the auspices of the Claremont Graduate School.

Astronomy

The general prerequisites for upper division courses or for concentration in the department are Astronomy 51, its equivalent, or a satisfactory background in science. Students transferring from Junior College or elsewhere may also qualify for upper division registration or departmental concentration by establishing the same prerequisites.

A basic program for concentration in Astronomy, with minor in Mathematics and Physics, should include Astronomy 155, 156, and at least six units of 180, together with not less than six units of mathematics selected from Mathematics 52, 151, 152, and four to seven units from Physics 153, 154 and 155. In special cases related upper division courses in chemistry or geology may be substituted in the minor fields. A reading knowledge of French and German is also recommended.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 152; Geology 59, 110 and 112, plus additional upper-division units totaling a minimum of 24, selected from Astronomy 103 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 151. The

comprehensive examination will consist of one 3-hour examination astronomy and one 3-hour examination in geology.

51a-51b. **DESCRIPTIVE ASTRONOMY.** *Mr. Whitney.* A study of historical and modern astronomy presented in non-technical form. Develops acquaintance with the planets and constellations and an appreciation of man's relation to the surrounding universe. Regular evenings with the telescopes at the Brackett Observatory are supplemented by project assignments and field excursions to the astronomical centers of the region. Classroom two hours per week; observatory, one period per week. Laboratory fee \$2.00 per semester. 3 units. *MWF, 11.*

102. **PRACTICAL ASTRONOMY AND METEOROLOGY.** *Mr. Whitney.* Consists of sun observations with telescope and spectroheliometer; studies of cloud formations and air mass movements related to current weather and reading of the Weather Bureau instruments at the Brackett Observatory. Photograph recording of observations introduce studies of the basic principles of the photographic process, and characteristics of various films and plates. Facilities are also offered for those wishing to make their own telescope mirrors. Two class periods and one laboratory period. Laboratory fee \$2.00. First semester. 3 units. Arranged.

103. **NAVIGATION.** *Mr. Whitney.* A basic course in the principles and practice of marine and air navigation. Observations of sun, moon and stars with sextants and transits of different types, and use of the latest almanacs and navigation tables provide practical experience in solving navigation problems. Prerequisite, Plane Trigonometry. 3 units. First semester. Laboratory fee \$2.00. Class *TTh, 1:15.* Laboratory arranged.

155. **CELESTIAL MECHANICS.** *Mr. Whitney.* A short course in the application of the laws of mechanics and gravitation to the motions of the heavenly bodies with problems on the prediction of eclipses and occultations and on the computation of the orbits of comets. 3 units. First semester. Arranged. (Omitted in 1952-53.)

156. **ASTROPHYSICS.** *Mr. Whitney.* Considers the applications of the principles of modern physical science and analyses to the study of stellar and cosmic problems and the reciprocal contributions of astronomical research. Laboratory observations are both visual and photographic. Class one hour observatory two periods. Laboratory fee \$2.00. Second semester. 3 units. Class, *W 2:15.* Laboratory arranged. (Omitted in 1952-53.)

180. **INVESTIGATIONS IN ASTRONOMY.** *Mr. Whitney.* A unified program of investigation is followed in some special field such as variable stars, lunar studies, solar phenomena, etc. Each semester, 1 to 4 units. May be repeated for credit. Laboratory fee \$2.00 per unit per semester. May also be elected in advanced study in navigation. Arranged.

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Graduate work in Applied Astronomy is available under the auspices of the Claremont Graduate School.

Biology

Requirements for concentration: Biology 112; Botany 12, 15, 17, 75, and at least nine units chosen from 103, 105a, 107, or 123a; Zoology 1, 37 or 137, and nine units chosen from 106, 107, 117, 130, 150, 157. (Biology 105 may be substituted for any upper division course in the above list except biology 112); additional upper division courses in botany, zoology, or biology to bring the total to 30 units or more. Related fields: high school or college chemistry; Physics 1 or 51, or Geology 1a, 1b and 2a, 2b.

1. GENERAL BIOLOGY. *Mr. Pequegnat and Staff*. A general course designed primarily for those who do not intend to take further work in biology. It may be taken for credit by those who have high school biology, botany, or zoology, and will consider material, methods and fundamental principles in the selected fields of biology considered most significant for every human being. Class includes laboratory demonstrations. Fee \$6.00. 3 units. First semester. Class *MWF*, 10 or *TThS*, 9. In addition register for any *one* of the following demonstration hours: *M*, 10, 11, 1, 2, 3, or 4.

2. GENERAL BIOLOGY. *Mr. Phillips*. A continuation of Biology 1a with emphasis on plant study. Class, demonstration and laboratory. Laboratory fee \$6.00. 3 units. Second semester. *MWF*, 10 or 11 must be kept open for class; either *T* or *W*, 1:15 to 4:00 must be kept open for laboratory.

3. BACTERIOLOGY. *Mr. Amrein*. General study of important bacteria, methods of culture and study, and their importance in disease and agriculture. Prerequisite: one year of biological work. Laboratory fee \$8.00. Second semester. 3 units. Class, *MW*, 10; laboratory, *MW*, 2:15 to 4:10.

4. GENETICS. *Mr. McCarthy*. This course considers modern developments in the study of heredity and evolution and their general application to plant and animal breeding and to eugenics and race questions. Prerequisite: one year of biological work. 3 units. Second semester. *MWF*, 8.

5. BIOLOGY. 19a, 159b. HISTORY OF BIOLOGY. *Mr. Ryerson, Mr. Amrein*. A commentary on the progressive trends and periods of biological science, tracing the continuity of ideas which have culminated in important discoveries. Leaders in each field are considered for special study in which the influences of their discoveries upon society and development of science are analyzed. 2 units. *Th*, 10.

Botany

Although botany is a pure science, and the curriculum at Pomona is planned with this in mind, the subject offers excellent basic training for applied fields. Study of botany may serve as preparation for graduate study and eventually for teaching, research, or service with such federal, state, or county governmental agencies as the United States Bureau of Plant Industry, Forest Service

including the Forest and Range Experiment Stations, National Park Service, Soil Conservation Service, Fish and Wild Life Service, state fish and game commissions, or agricultural inspection agencies.

Botany Concentration: LOWER DIVISION COURSES, Botany 12, 15, 17, Zoology 1 (or Biology 1a and a summer session at the Marine Laboratory). UPPER DIVISION COURSES, Biology 112; Botany 103, 105, 107, 123a, and additional courses in botany (other than 181), selected to make a total of 24-36 units of upper division work. RELATED FIELDS, high school or college chemistry (students emphasizing plant physiology should have Chemistry 1, 59, 106, and 110 is recommended); high school or college physics (Physics 151) or Geology 1. Prospective candidates for graduate work should consult the department concerning foreign language requirements.

Seniors with concentration programs in botany or in biology emphasizing botany are required either (1) to present a satisfactory paper and to pass oral examination on the field of the paper, or (2) to pass the senior comprehensive examination.

All students concentrating in botany should consult Mr. Benson concerning the plant collection built up in various courses. This is a graduation requirement, and the collection must be submitted for inspection at the time of senior comprehensive examination. Credit for individual work on collection may be had by registration in Botany 75.

Botany-Zoology Concentration: See Biology.

Botany-Chemistry Concentration: Botany 12, 15, 17, 75; Chemistry 1, Physics 51. UPPER DIVISION COURSES, Botany 103, 123, 158, 105a, and 107. Chemistry 106, 110, 111. Recommended electives from the following: Biology 112; Botany 105 or 107, whichever was omitted above; Chemistry 158, 184, 187; Zoology 1, 37, 137, 121, 123. Botany 12 and 15 or 17 and Chemistry 1 should be taken in the freshman year, and the full program should be planned as early as possible.

12. GENERAL BOTANY. *Mr. Benson and Mr. Phillips.* An elementary course for those wishing general information concerning plants or foundation work in botany. Special attention is given to the plant as a living organism, with emphasis is upon structure and function in flowering plants. Studies of evolution and of heredity are included. Laboratory fee \$6.50. 3 units. First semester. *MWF, 11* must be kept free for class; laboratory Section A, *T, 1:15-3:00*; Section B, (if there is sufficient demand), *Th, 1:15-3:05*.

15. CLASSIFICATION AND FIELD BOTANY. *Mr. Benson.* An elementary course in classification of primarily the flowering plants; with much field work. No prerequisite, but permission of the instructor required. Laboratory and field trip fee \$8.75. 3 units. Students concentrating in botany or in biology with emphasis on botany must, others may, register for at least 1 unit in Botany 75 concurrently. Second semester. Class, *MW, 11*; laboratory Section A, *T, 1:15-4:00*, Section B, (if sufficient demand), *Th, 1:15-4:00*.

7. SURVEY OF THE PLANT KINGDOM. *Mr. Phillips*. Relationships, life histories, and development of algae, fungi, liverworts, mosses, ferns, cone-bearing trees, and flowering plants. No prerequisite, but permission of the instructor required. Laboratory fee \$6.50. 3 units. First semester. Given in alternate years. Class, *TTh*, 8; laboratory *W*, 1:15-4:05. (Omitted in 1952-53.)

5. PLANT CLASSIFICATION. *Mr. Benson*. Individual work in classification of vascular plants (ferns, cone-bearing trees, and flowering plants). The student begins or continues a collection of specimens used for developing a comparative method of plant identification. May be taken as an Elective, but required concurrently with Botany 15 for those concentrating in botany or in biology with emphasis on botany. May be repeated for credit. Permission of instructor required. (Offered by Mr. Phillips in Claremont Summer School, first session, as a two unit field course.) Laboratory fee \$2.00 per unit. 1 or 2 units. First semester, arranged. Second semester, arranged, but including either *F*, 11 or *M*, 2:15-4:05.

1. ELEMENTARY BOTANICAL PROBLEMS. *Staff*. This course offers to qualified students opportunities for additional supervised laboratory work in such fields: (a) structure and classification of algae, (b) culture and special physiology of plants of any group favorable for study, (c) structure and development of plants, or (d) ecology. Each semester, 1 or 2 units, but not more than 1 unit may be taken in the first enrollment for a problems course. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

103. PLANT ECOLOGY (AUTECOLOGY). *Mr. Phillips*. A study of the effect of environment upon plants of forests, deserts, chaparral, grassland, and woodland, including the use of ecological and weather instruments in the field; the effect of plants on the environment; and ecological adaptation in relation to plant evolution. Prerequisite: Botany 12 or permission of the instructor. Laboratory fee \$8.00 and breakage deposit \$5.00. First semester. Class *TTh*, 9; laboratory and field trips, *F*, 1:15-4:05 with occasional longer trips.

105a, 105b. CLASSIFICATION OF FLOWERING PLANTS. *Mr. Benson*. Study of the local native flowering plants and also of ferns and cone-bearing trees. Principles and methods of classifications; evolutionary series; history of botanical classifications; geographical distribution of plants correlated with geological history. Field trips for study of plants in their native habitats. Prerequisite, Botany 15. Laboratory and field trip fee \$8.75 each semester. 3 units. Given in alternate years. Class, *TTh* 10; laboratory and field *M*, 2:15-5:05.

107. STRUCTURE, DEVELOPMENT, AND RELATIONSHIPS OF GREEN PLANTS. *Mr. Benson*. A review of the structure, evolutionary series, and relationships of the groups of green land and freshwater plants. Prerequisite, Botany 12 and 17 or equivalent. Laboratory fee \$8.00. 3 units. Second semester. Given in alternate years. Class, *TTh*, 10; laboratory *M*, 2:15-5:05. (Omitted in 1952-53.)

123a, 123b. PLANT PHYSIOLOGY. *Mr. Phillips*. A study of physiological processes and principles, including photosynthesis, germination, dormancy, water

relations, mineral nutrition, respiration, growth and growth hormones, and factors affecting flowering and fruiting. Experiments include growing plants in the greenhouse and laboratory exercises. Prerequisite: Botany 12; high school chemistry, and after 1951-52 elementary college chemistry; or permission of the instructor. Laboratory fee \$10.00 each semester and breakage deposit \$5.00. 4 units. Given in alternate years. Class *MWF*, 8; laboratory *F*, 1:15-4:05. (Omitted in 1952-53.)

158. ADVANCED PLANT ECOLOGY (SYNECOLOGY). *Mr. Phillips*. The analysis of plant communities by various types of field sample plots to determine which plants are associated and why; discussions of factors affecting plant geography and the major plant communities primarily of the United States. Prerequisites: Botany 12, 15, 103, and completion of or concurrent registration in Botany 105; or permission of the instructor. Laboratory fee \$8.00. 3 units. Second semester. Given in alternate years. Class *TTh*, 9; laboratory and field trips *F* 1:15-4:05 with occasional longer trips.

167. PLANT ANATOMY. *Mr. Phillips*. A review of the structure of seed plants and preparation of microscope slides with practice on materials partly of the student's own choosing to represent structure or development of plants or cytological data. Prerequisites, Botany 12, 17, and 107; or permission of the instructor. Laboratory fee \$7.00 and the cost of special materials for the student's slide collection. First semester. 3 units. Given in alternate years. Class *MWF*, 11, must be kept free for class; laboratory, arranged or *Th*, 1:15-5:00.

175. PRINCIPLES OF PLANT CLASSIFICATION. *Mr. Benson*. Principles involved in organizing plant groups according to genetic relationships into families, genera, species, varieties, etc. Methods of exploration for data, classification of native populations, choice of scientific names, description, and documentation. Prerequisites, Botany 12, 15, and 105, or permission of instructor. Laboratory and field trip fee \$9.00. First semester. 3 units. Given in alternate years. Class, *TTh*, 10; field trips and laboratory, *M*, 2:15-5:05. (Omitted 1952-53.)

181. ADVANCED BOTANICAL PROBLEMS. *Staff*. Special individual work in a field of botany for students with adequate preparation. The student must anticipate preparation of a thesis for the Master's Degree by beginning a problem or continuing one begun in Botany 123, 158, 167, 175 or other courses, or he may work upon any significant problem approved by the instructor. Each semester. 1 to 3 units. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

NC198. Senior Seminar. *Staff*. Review and integration of various phases of botany and the biological sciences. Required of all seniors the year of graduation and of February graduates the preceding year. No credit. Arranged; meeting for one hour in alternate weeks. Second semester.

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Graduate work in botany is offered through the Claremont Graduate School by the joint staffs of Pomona College and the Rancho Santa Ana

botanic Garden (now located in Claremont). The facilities for research in plant classification are particularly good because the Pomona College Herbarium includes about 315,000 specimens and the combined herbaria nearly 600,000. The libraries of both institutions have been developed primarily for work in this field, and the Garden has unusual facilities for experimental study of species. The instruction and research staffs include specialists in plant taxonomy or systematic botany, experimental study of evolution of species, cytology and genetics, ecology and plant physiology, and mycology and cryptogamic botany. The vicinity of Claremont offers remarkable opportunities for field study of both plant classification and ecology because forest, alpine, woodland, chaparral, grassland, ocean shore, and various desert floras occur within a forty mile radius.

COURSES OPEN IN 1952-53 TO QUALIFIED UNDERGRADUATES

- 10a, 210b. EVOLUTIONARY GENETICS. *Mr. Grant*. A theoretical consideration of the mechanisms by means of which species and other groups become differentiated. 4 units. First semester. 2 units. Second semester. *TTh*, 4:00-6:00.
20. PLANT CYTOLOGY. *Mr. Lenz*. A study of the cell and especially of chromosomes. 3 units. First semester, *W*, 1:15-4:05 and 1 hour arranged.
25. PHYLOGENY OF ANGIOSPERMS. *Mr. Munz*. Classification systems of flowering plants; advanced course. 3 units. Second semester. Arranged.
47. MORPHOLOGY OF PTERIDOPHYTES AND GYMNASPERMS. *Mr. Munz*. Life history and classification of various groups of ferns, fern-like plants, and cone-bearing trees. 3 units. First semester. Arranged.

Zoology

Three programs of concentration are offered: Zoology; Zoology-Chemistry; and Zoology-Botany (Biology). Students interested in pre-medical training should consult the pre-medical course under Pre-professional Programs.

Zoology Concentration. Requirements: Zoology 1, 117, 137, and 157. In addition Zoology 130 and 150 and Biology 159 are strongly recommended.

Zoology-Chemistry Concentration. Requirements: Zoology 1, 137, and Biology 159; Chemistry 1, 59, 106, and one semester of 110 and 111; Physics 1 or 51; and 8 units chosen from Chemistry 110b, 111b, 107, 109; Zoology 106, 107, 117, 157, and Biology 159.

Zoology-Botany Concentration. For requirements consult program listed under Biology.

The Zoology Department of Pomona College in an arrangement with the California Institute of Technology offers summer work at the Kerckhoff Marine Laboratory at Corona del Mar. The 1952 session will run from August 4 to September 6 inclusive. Tuition for full registration (6 units) \$10.00. Further information may be secured from the Department of Zoology.

1a, 1b. GENERAL ZOOLOGY. *Mr. Pequegnat and Staff.* An introduction to the special fields of modern zoology for those desiring general information concerning animals, as well as for majors in the department. Reference is made to all classes of animals, but only those forms which best illustrate important zoological principles are studied intensively. No prerequisites. Laboratory \$6.00 each semester. 3 units. First semester: Class *MW* or *TTh*, 10; laboratory section (choose one of the following): *W*, 1 to 3 or 3:15 to 5:15, or *F*, 1 to 3 or Arranged. Second semester. Class, *MW* or *TTh*, 10; laboratory section (choose one) *T*, 1 to 3 or 3:15 to 5:15, or *W*, 1 to 3 or *Th*, 1 to 3.

11. MARINE ZOOLOGY AND ECOLOGY. *Mr. Pequegnat.* An elementary course devoted to discussion of biological principles as observed in marine animals. In addition considerable attention is given to the evolutionary development of the various groups, as well as to their specific identification, their ecological distribution, and their habits. Lecture, laboratory, and field work. Designated especially to fulfill the Biological Science requirement. Offered at the Marine Laboratory. 6 units.

37. INTRODUCTION TO ANATOMY AND PHYSIOLOGY. *Mr. McCarthy.* A course designed primarily for students whose interests lie in physical education, physical or occupational therapy or nursing, psychology or sociology. Special attention given to the human subject. 4 units. Laboratory fee \$6.00. Prerequisite: one year of biological work. Second semester. Class, *MWF*, 11; laboratory 1:15 to 4:05.

106. PARASITOLOGY. *Mr. Amrein.* An introduction to the general nature of parasitism, including a survey of all types of animal parasites in which those of greatest medical, economic, and social importance to man will receive major consideration. Prerequisite, any one of following: Zoology 1, 11, Biology 1. 2 units. First semester. *MW*, 9.

107. PARASITOLOGY LABORATORY. *Mr. Amrein.* Study both of prepared materials of significant parasites and their biological vectors, and of living parasites removed from invertebrate and vertebrate hosts. Prerequisite: Zoology 106 (may be taken concurrently). Laboratory fee \$4.00. 1 unit. First semester. *M*, 2:15-5:05.

117a-117b. DEVELOPMENTAL AND COMPARATIVE ANATOMY. *Mr. McCarthy, Mr. Pequegnat.* A study of development of representative vertebrates from fertilization through organogenesis, and an analysis of the phylogenetic changes undergone by organ-systems. Prerequisite: Zoology 1. Laboratory fee \$8.00 each semester. 4 units. Class, *MW*, 9. Laboratory either *TTh*, 1-3 or 3:15-5:05.

121. MAMMALIAN PHYSIOLOGY. *Mr. Ryerson.* An introduction to the study of the functions of the organ-systems of mammals, with especial reference to man. Particular attention will be given to the elements of nutrition and to the integrative aspects of the endocrine and nervous systems. 3 units. Second semester, *MWF*, 8. Replaced by Zoology 137 in 1953-54.

123. LABORATORY METHODS IN PHYSIOLOGY. *Mr. Ryerson.* Special emphasis

in the physiology of the vertebrates. Prerequisites: Zoology 121 (may be taken concurrently), and one year of chemistry. Laboratory fee \$6.00. Second semester. 2 units. *WF, 1:15*. Replaced by Zoology 137 in 1953-54.

25. HISTOLOGICAL TECHNIQUE. *Mr. McCarthy*. Theory and practice of preparation of vertebrate cells and tissues for microscopical study. Prerequisite: one year of biological science. May be repeated for credit. Laboratory fee \$4.00. 3 units. Second semester. *F, 10*; laboratory *Th, 1:15-4:05*.

30. MARINE INVERTEBRATES. *Mr. Pequegnat*. A study of invertebrates residing in the sea from the points of view of their phylogenetic relationships, their morphology, and their physiology. Lecture and laboratory. Laboratory devoted principally to Pacific Coast types. Offered at the Marine Laboratory. 3 units.

37a, 137b. ADVANCED ANATOMY AND PHYSIOLOGY. *Mr. Ryerson*. A course integrating the discipline of anatomy and physiology, including regional dissection of the mammal and microscopic study of tissues and laboratory experiments in physiology. Prerequisites: Zoology 1 or 37. General chemistry recommended. 5 units. Laboratory fee \$8.00 each semester. Class, *MWF, 8*; laboratory *WF, 1 to 3 or 3:15-5:15*. (Omitted in 1952-53.)

50. MARINE ECOLOGY. *Mr. Pequegnat*. A study of marine invertebrates as they exist in the field. Animals are observed and collected in the field and returned to the laboratory for specific identification and observation in the living state. The lectures are devoted to discussion of the distribution of each species observed and the factors which may account for these distributional patterns. The course is so organized that anyone registering for it should either have a thorough grounding in the morphology and physiology of marine invertebrates or take Zoology 130 concurrently. Offered at the Marine Laboratory. 3 units.

57a, 157b. ANIMAL ECOLOGY. *Mr. Amrein, Mr. Pequegnat*. A study of the land vertebrates and insects, principally of this region, considering the bases of classification, life histories, populations, and the factors which account for their present distribution. 3 units. Laboratory fee \$4.00. Class, *TTh, 9*; laboratory *F, 1:15 to 4:05*.

99. INTRODUCTION TO RESEARCH IN ZOOLOGY. *Staff*. Each semester. 1 to 3 units. May be repeated for credit. Laboratory fee \$2.00 per unit. Offered at Marine Laboratory as well as at Claremont. Arranged.

Chemistry

Concentration Requirements: Chemistry 1, 59, 106, 107, 109, 110, 111, 158, 59; Physics 51; Mathematics 1, 65.

Preprofessional Program: Students who plan professional work in Chemistry should follow the suggested program below. It is based upon the recommendations of the American Chemical Society Committee for Professional

Training of Chemists. Pomona College has been placed upon the approval list by this committee. The schedule is intended as a guide only for aid in planning the program and individual deviations may be made as needed.

Freshman Year: Chemistry 1 or (59-106); Mathematics 1; English 1; Electives.

Sophomore Year: Chemistry 59-106 if not taken in first year, 110, 111; Mathematics 65; Physics 51; German 1; Electives.

Junior Year: Chemistry 107, 158, 159; German 53; Electives.

Senior Year: Chemistry 109, 112, 184, 185, 187 (181 and 199 also recommended but not required to satisfy ACS certification); Electives.

Zoology-Chemistry Concentration: Requirements: Zoology 1, 137, and Biology 105; Chemistry 1, 59, 106, and one semester of 110 and 111; Physics 1 or 5 and 8 units chosen from Chemistry 110b, 111b, 107, 109; Zoology 106, 107, 117, 157, and Biology 159.

Botany-Chemistry Concentration: See Botany.

Preparation for Teaching: Students who plan to teach in secondary schools should consult the department before registration for the junior and senior years. By proper coordination of work it is possible to obtain the Master's degree in Chemistry and the general secondary credential upon completion of graduate work for one year plus two summer sessions.

Three Year Program for Junior College Graduates: Transfer students from Junior Colleges may be able to plan a three year program leading to the Master's degree and/or a secondary credential. The departmental chairman should be consulted for details.

Fees: A fee is required for each laboratory course, to cover the cost of chemicals. In addition a locker deposit must be made to cover breakage and loss of equipment. The unused balance of the deposit is returned at the end of the year.

1a, 1b. INTRODUCTORY CHEMISTRY. *Mr. Pierce.* Beginning course to acquaint the student with basic laws of chemistry and reactions of the more common elements. 3 units. Lectures, *TTh*, 9. Laboratory *Th* or *F*, 1:15-4:05. Fee, \$6.00 each semester. Deposit, \$5.00 for the year.

Second Year Chemistry. The courses in qualitative and quantitative analysis, Chemistry 59, 106, are coordinated to give an advanced review of chemical reactions and theories along with the study of analytical methods. Exceptionally well prepared students may omit Chemistry 1 and start with 59.

59. QUALITATIVE ANALYSIS. *Mr. Smith.* The lectures deal with application of the principles of chemical equilibrium to the separations and identification of the common ions, and with the chemical reactions of these ions. Semimicro

analytical procedures are used. Prerequisite: Chemistry 1 or consent of instructor. 4 units. Fee, \$6.00, deposit, \$5.00. First semester. Lecture *MW*, 10. Laboratory, *M*, 2:15-5:05; *W*, 1:15-4:05.

06. BEGINNING QUANTITATIVE ANALYSIS. *Mr. Pierce*. The lectures deal with the theory and practice of analytical methods and with selected topics of inorganic chemistry. Prerequisite: Chemistry 59. 4 units. Fee, \$8.00, deposit, \$5.00. Second semester. Lectures, *MW*, 10. Laboratory, *M*, 2:15-5:05; *W*, 1:15-4:05.

07. ADVANCED QUANTITATIVE ANALYSIS. *Mr. Pierce*. Prerequisite, Chemistry 106 or equivalent. 3 units. Fee \$8.00, deposit \$5.00. First semester. Laboratory *M*, 2:15-5:10 and *TW*, 1:15-4:05.

09. THEORY OF QUANTITATIVE ANALYSIS. *Mr. Pierce*. Lectures and problem assignments on complex equilibria, oxidation potentials and more advanced theory of quantitative separations. Prerequisite, Chemistry 106 or equivalent. 1 unit. First semester. Lecture *F*, 9.

10a, 110b. ELEMENTARY ORGANIC CHEMISTRY. *Mr. Helmkamp*. The first semester is a survey of organic chemistry including aliphatic and aromatic chemistry. The second semester is a more detailed study of some of the more advanced organic reactions. Prerequisite, Chemistry 1 or equivalent. 3 units. Lectures *MWF*, 11.

11a, 111b. INTRODUCTION TO ORGANIC LABORATORY METHODS. *Mr. Helmkamp*. First semester, instruction in laboratory operations and organic preparations. Second semester, organic preparations and introduction to qualitative organic analysis. 1 unit. Fee \$6.00, deposit \$5.00 each semester. Laboratory first semester, *M*, 2:15; *Th* 1:15; second semester, *Th*, 1:15.

12a, 112b. ORGANIC SYNTHESIS. *Mr. Hansch*. Advanced preparations to supplement the laboratory work of Chemistry 111. Open only to students making the pre-professional program. 1 unit. Prerequisite, Chemistry 110, 111. Fee \$7.50, deposit \$5.00 each semester. Laboratory *Th*, 1:15-4:05. (Omitted in 1952-53.)

58a, 158b. PHYSICAL CHEMISTRY. *Mr. Smith*. Prerequisite Chemistry 106, 110, Physics 51, Mathematics 65. Chemistry 110 may be taken concurrently. 3 units. Lectures *TThS*, 10.

59. PHYSICAL CHEMISTRY LABORATORY. *Mr. Smith*. Prerequisite, Chemistry 58a. 3 units. Fee \$10.00, deposit \$5.00. Second semester. Laboratory *M*, 2:15-5:10 and *TW*, 1:15-4:05.

81a, 181b. USE OF CHEMICAL LITERATURE. *Staff*. Lectures and assigned problems on the methods for effective use of chemical literature. Prerequisite: Chemistry 110, German 1. 1 unit. Arranged.

184. ADVANCED ORGANIC CHEMISTRY. *Mr. Helmkamp*. A survey of current theories of organic reaction mechanisms. Prerequisite, Chemistry 110, 158 3 units. Second semester. Lectures MWF, 9.

185. ADVANCED INORGANIC CHEMISTRY. *Mr. Smith*. The lectures will include a discussion of atomic and molecular structure as related to spectra, and selected topics as coordination compounds, nuclear chemistry, chemistry of the lanthanide and actinide series, and the chemistry of hydrides and non-metallic oxides. Prerequisites: Chemistry 107, 110, 158 (may be taken concurrently). 2 units. First semester. Lectures MW, 9.

187. QUALITATIVE ORGANIC ANALYSIS. *Mr. Helmkamp*. The use of systematic procedures for the identification of organic compounds. Prerequisite, Chemistry 106, 110, and reading knowledge of German. 3 units. Fee \$7.50, deposit \$5.00. First semester. Laboratory W, 1:15-4:10, plus two arranged periods.

192a-192b. SPECTROCHEMICAL ANALYSIS. *Mr. Pierce*. Training in the operation of the spectrograph, use of excitation sources, qualitative analysis of a variety of samples, densitometry, preparation of working curves, and quantitative analysis. Each student is expected to prepare and test a working curve for a specific analysis. Assigned readings and frequent conferences in addition to laboratory work. Prerequisite, Chemistry 107, 158, and consent of instructor. Must be taken for a total of 6 units, but may be started either semester. 3 units. Fee \$10.00 plus cost of supplies (film and electrodes). Arranged.

199. UNDERGRADUATE RESEARCH. *Staff*. Seniors may take 6 units of research in Physical, Organic or Analytical Chemistry, under direction of a staff member. The work may be taken in one semester or extended over two. Thesis is required. Prerequisite, average of B in chemistry courses and consent of instructor. Fee \$3.00 per unit, deposit \$5.00. Each semester. Arranged.

NC 171. GLASSBLOWING. *Mr. Smith*. Training is given in the fundamental operations involved in the construction of scientific glass apparatus (inert seals, metal to glass seals, construction of mercury vapor pump and McLeod gauge). Academic credit toward graduation is not given for this course but the registrant receives a recorded grade indicating the proficiency attained. 2 units. Either semester. Fee \$7.50 plus cost of glass used. Laboratory arranged.

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Graduate work leading to the M.A. degree is offered under auspices of the Claremont Graduate School. The Claremont catalog should be consulted for details.

Classics

In the interest of providing a maximum offering in Classics, a coordinate program is offered by the departments of Pomona and Scripps College.

road program is thereby assured to meet the needs of all students who desire training in Latin and Greek or in the literature of Classical Antiquity in translation. Mr. Carroll will gladly advise Pomona students regarding opportunities in this program, and will assist in developing programs of study which will meet basic requirements.

GREEK

12a-51b. **ELEMENTARY GREEK.** *Mr. Carroll or Mr. Palmer (Scripps).* A study of the principles of Greek grammar for beginning students. The course is designed to provide a firm foundation for the further study of the language and its literature. Simplified reading materials will be utilized as fully as possible. 3 units. *MWF, 8.* (Omitted in 1952-53.)

121a, 101b. **INTERMEDIATE GREEK.** *Mr. Carroll or Mr. Palmer (Scripps).* For students who have had Greek 51a-51b or equivalent. A reading course in Greek with selections from the Apology of Socrates, Homer's Odyssey, Euripides' Medea, the Greek New Testament and Church Fathers. 3 units. Arranged.

LATIN

1-1b. **ELEMENTARY LATIN.** *Mr. Carroll or Mr. Palmer (Scripps).* Latin grammar and syntax for students with no secondary school Latin. The aims and purposes of individual students enrolled will be particularly considered by the instructor in this course. Its general goal is to develop an ability to read Latin as quickly as possible, and to make use of that ability for a further understanding of the language. 3 units. *MWF, 8.*

7a, 57b. **INTERMEDIATE LATIN.** *Mr. Carroll or Mr. Palmer (Scripps).* For students with one or two years of secondary school Latin, or Latin 1a-1b. Selected readings from Sallust, Cicero, Virgil, Ovid, St. Augustine, and the Vulgate Bible. Oral translation and discussions of grammar and syntax will be coordinated with lectures on the history of Latin literature. Emphasis will be on reading Latin as a living language. Attention will be given to the needs of the individual student in preparation of reading program. 3 units. Arranged.

17a, 117b. **ROMAN WRITERS OF THE REPUBLIC.** *Mr. Carroll or Mr. Palmer (Scripps).* A survey in Latin of the outstanding Roman writers in the second and first centuries B.C. An intensive study of a single author will be made during the second semester of the course. Open to all students who have had three years or more of secondary school Latin or the equivalent. 3 units. Arranged.

18a, 118b. **ROMAN WRITERS OF THE EMPIRE.** *Mr. Carroll or Mr. Palmer (Scripps).* A survey in Latin of the outstanding Roman writers in the first and second centuries A.D. An intensive study of a single author will be made during the second semester of this course. Open to all students who have three years or more of secondary school Latin or equivalent. 3 units. (Omitted in 1952-53.)

GREEK AND ROMAN LITERATURE IN TRANSLATION

160a, 160b. CLASSICAL EPIC, DRAMA AND PROSE IN THE WESTERN HERITAGE. *Mr. Carroll*. A course in general education for all students desiring orientation in the culture of the Graeco-Roman world and its legacy to modern civilization. No previous training is required in Classical languages or Ancient History. A broad program of lectures covering the salient phases of ancient life and art will be integrated with a reading program in translation including Homer, Vergil, the Classical dramatists, Thucydides, Tacitus, Aristotle and St. Augustine. An effort will be made to trace the principal intellectual currents of antiquity and to indicate their influence upon modern art, literature and society. 3 units. *MWF, 11.*

AVAILABLE AT SCRIPPS COLLEGE

I-106. GREEK AND ROMAN COMEDY AND SATIRE. *Mr. Palmer*. A course designed to cover in English translation the dramas of Aristophanes, Menander, Plautus, and Terence and the literature of the outstanding Greek and Roman writers in the field of satire. Lectures will be given on the history of the development of the theatre, on the history of comedy and the mime, and on the development of satire and satiric forms. Year course. Arranged

I-107. GREEK AND ROMAN TRAGEDY. *Mr. Palmer*. A course designed to cover in English translation the dramas of Aeschylus, Sophocles, Euripides and Seneca. Lectures will be given on the history of the development of the theatre, on the history of tragedy, and on the development of the tragic form. 3 units. (Omitted in 1952-53.)

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HISTORY OF GREECE. For description see History 101.

HISTORY OF ROME. For description see History 102.

ANCIENT ART AND ARCHAEOLOGY. For description see Art 55a, 55b.

Comparative Literature

Concentration in Continental Literature. Designed for students who are interested in European Literature.

Requirements: 24 units in courses numbered over 100. Twelve of these units must be in Continental Literature (in translation), twelve in European or classic literature in the original language. Electives in English literature and Classics 160a, b are strongly recommended.

181a, 181b. READINGS IN CONTINENTAL LITERATURE IN TRANSLATION. *Mr. Baumann*. A study of outstanding works of Molière, Goethe, Flaubert, Balzac, Dostoevsky, Tolstoy, Ibsen and others (for Juniors and Seniors only). 3 units. May be repeated for credit. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

I-152a, 152b. COMPARATIVE LITERATURE. *Mr. Merlan*. Year course. W 4:15-6:05.

Economics

concentration program in Economics is suggested in general for those who wish to understand the nature and operation of the economic system in which they live and in particular for the student who contemplates a career in business, law, teaching, or research. Emphasis in the training is on sources of information and processes of analysis which are essential to leaders in the business and professional world.

Prerequisites: Economics 51 and 52 or equivalent, are prerequisites for all advanced courses in economics.

Required courses: Economics 57, 71, 103, 104, and 111 or 190 and other courses in economics to bring the total of upper division courses to 24 units.

Recommended program for Pre-Business, Pre-Law, and Industrial Research and Management students: Economics 51, 52, 57 and 71 in the sophomore year, 103, 104, 109, 110 in the junior year, and 111, 190 or 198, and other courses in the field of the student's special interest during the senior year to bring the total of upper division courses in economics to 24 units.

Pre-Professional programs: Students planning to take graduate work in business administration or law should include courses in English writing and literature, speech, psychology, and philosophy in addition to courses in government, history, and sociology. Courses in mathematics and in one or more foreign languages are strongly recommended particularly for those intending to take graduate work in economics in preparation for a career in teaching or research.

Honors Study: A student who wishes to major in Economics and pursue an individualized program of honors study should confer with a member of the department during his sophomore or junior year.

Junior Transfers: Transfer students should consult with some member of the Economics staff with a view to adjusting their programs so as to achieve satisfactory concentration.

Three-Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three-year program enabling them to earn both the B.A. and M.A. degrees. The work for the Master's degree may be taken in economics, business & public administration, or in political economy.

In addition, the Claremont Summer Session, sponsored jointly by the four associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them, within

the three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

AMERICAN ECONOMIC AND POLITICAL INSTITUTIONS

Pomona College believes that its graduates should be familiar with the economic and political foundations of American life. To this end the Department of Economics and Government have organized a year course in American economic and political institutions through which students who cannot take a full year in each subject may nevertheless gain some understanding of both fields. This course combines a semester's study of economics with another semester devoted to American Government and the formal classwork is supplemented by a series of special lectures which all students are expected to attend. These lectures (which are open to other students and faculty as well) are designed to present the insights of persons who have had practical experience in business and government and the speakers are chosen from leaders in government, industry, finance, labor and law.

That part of the course pertaining to economic institutions (Economics 51) is offered only during the fall term and that pertaining to politics (Government 52) only in the spring but students may begin the course at whichever time best suits their schedules. The combined course may be offered in fulfillment of one of the requirements for distribution in the lower division. For outline of contents and time schedule see regular course descriptions under the respective departments.

ECONOMICS

51. **ECONOMIC ANALYSIS.** *Staff.* The basic course in economics for both major and non-majors. An introduction to modern economic society with emphasis on the nature and operation of the American economic system. The role of prices, profits, and competition in a private enterprise system and related public policies; conservation of resources; forms of business organization; security and speculation; money and banking; inflation and deflation. Not open to freshmen. 3 units. First semester. *MWF, 9, 11; TThS, 9, 10;* for those continuing second semester with Government 52, *TThS, 8, 9.*

52. **ECONOMIC PROBLEMS AND POLICIES.** *Staff.* A continuation of Economics 51 with emphasis on current problems and related public policies. Fluctuations in production, income, and employment; taxation and fiscal policy; international trade and finance; the relative power of industry, labor, and agriculture; socialist theory and practice; fascism and communism. Prerequisite: Economics 51. 3 units. Second semester. *MWF, 9, 11; TThS, 9, 10.*

57. **STATISTICS FOR THE SOCIAL SCIENCES.** *Mr. Child.* A course in the application of quantitative method to economic and social problems with emphasis on the interpretation of the results obtained. Frequency series and time series analysis, elementary sampling, simple correlation, and index numbers. (Credit

will not be given for both Economics 57 and Psychology 102.) 3 units. Second semester. *TTh*, 8; laboratory, *T* or *Th*, 1:15-3:15.

1. ELEMENTARY ENTERPRISE ACCOUNTING. *Mr. Rostvold*. The theory and practice of accounting in the merchandising business firm. Corporation, partnership, and individual proprietorship accounting. 3 units. First semester. *Th*, 8; Laboratory, *W* or *F*, 1:15-3:15.

2. ELEMENTARY COST ACCOUNTING. *Mr. Rostvold*. The theory and method of accounting in the manufacturing business unit. Emphasis on job-order, process, and standard cost systems. Prerequisite: Economics 71 or equivalent. 3 units. Second semester. *TTh*, 8; Laboratory, *W* or *F*, 1:15-3:15.

ADVANCED COURSES

Economics 51 and 52 or equivalent are prerequisites for all advanced courses in Economics.

3. MONEY AND BANKING. *Mr. Bond*. Principles of money, credit, and banking interpreted in the light of the institutions and financial organization designed to supply society with adequate media of exchange. The relation of money, income, and prices, and the problems of monetary management and fiscal policy. 3 units. First semester. *TThS*, 10.

4. ECONOMIC THEORY AND BUSINESS POLICY. *Mr. Child*. A study of the organization of economic activity through markets and prices with emphasis on the analytical method in economics; resource use and income division in markets containing various mixtures of competition and monopoly; the relationship between economic analysis and business practice. 3 units. First semester. *MWF*, 10.

9. PUBLIC FINANCE. *Mr. Rostvold*. A study of government taxing and spending policies and of their effect on the volume of production and employment, the price level, and the distribution of income. Special attention is given to proposals for tax reform. 3 units. Second semester. *TThS*, 10.

10. INDUSTRIAL COMPETITION AND PUBLIC POLICY. *Mr. Bond*. A study of the basic American policy of maintaining competition to control economic behavior. Corporations, combinations, trade practices, and industrial cooperation; analysis and court interpretation of laws dealing with restraint of trade, monopolizing, unfair competitive methods, discrimination, false advertising, and fair trading; the Antitrust Division and the Federal Trade Commission. 3 units. Second semester. *MWF*, 10.

11. LABOR ECONOMICS. *Mr. Perry*. An examination of the tools of economic analysis in their relation to problems of labor. A brief history of organized labor is followed by an analysis of such problems as labor productivity, minimum wage legislation, maintenance of full employment, and union wage and hour policies. Economics 104 or equivalent is desirable but not required as a prerequisite. 3 units. First semester. *MWF*, 9.

115. INTERNATIONAL TRADE AND FINANCE. *Mr. Child*. A study of trade principles, problems, and policies. Topics include the balance of payments and the processes of its equilibrium, international commercial policies and trade agreements, the international monetary fund and the world bank, and the problem of world reconstruction. 3 units. Second semester. *TThS, 10*.

120. PUBLIC UTILITY ECONOMICS. *Mr. Rostvold*. An historical and analytic study of public utility problems in the United States. Illustrative material drawn from the various utility industries with emphasis on the economics of overhead costs, and the economic and legal problems involved in the various types of regulation. First semester. 3 units. *MWF, 10*.

158. APPLIED STATISTICS. *Mr. Bond*. A review of the basic concepts covered in Economics 57 followed by a study of the methods currently used in market research, quality control, and public opinion pooling. Designing the sample questionnaire construction, training interviewers, variance analysis, partial and multiple correlation. 3 units. First semester. *TThS, 9*.

190. HISTORY OF ECONOMIC THOUGHT. *Mr. Perry*. A survey of the development of economic science and policy from the forerunners of the classical school to the present date with emphasis on those aspects of economic doctrine which contribute most to an understanding of the present status of the field of economics. 3 units. Second semester. *MWF, 9*.

192. BUSINESS CYCLES. *Mr. Child*. An introduction to the general problem of economic change; the history, theory, and measurement of business cycles together with study of theories of cyclical stabilization. 3 units. First semester. *TThS, 10*.

198. INTRODUCTION TO RESEARCH. *Mr. Perry*. Supervised advanced study in any field of economics. Each student will pursue an individual research project which will provide the basis for oral reports, group discussion, and a final written research report. Open to qualified seniors with the permission of instructor. 3 units. First semester. *MWF, 11*.

199. READINGS IN ECONOMICS. *Mr. Bond*. Senior seminar devoted to the study of current economic problems and policies with emphasis on sources of information and the use of tools acquired in earlier courses. Selected readings, or reports, written exercises. Open to qualified seniors with permission of instructor. 3 units. Second semester. *MWF, 11*.

BUSINESS LAW. For description, see Government 106.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ACCOUNTING FOR BUSINESS CONTROL. *Mr. Gibbs*. 3 units. Second semester.

TAX ACCOUNTING. *Mr. Briggs*. 3 units. Second semester.

FOREIGN TRADE. *Mr. DeHaas*. 3 units. Second semester.

PERSONNEL ADMINISTRATION. *Mr. Phelps*. 3 units. Second semester.

CORPORATION FINANCE. *Mr. Taylor*. 3 units. Both semesters.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

Open to qualified seniors with the permission of the chairman of the department and the instructor of the graduate seminar. For other graduate courses, consult the catalog of The Claremont Graduate School.

6. MONETARY THEORY AND POLICY. *Mr. Bond*. 4 units. Second semester.

Education

The courses in Education in Pomona College are designed to supply the general background that an intelligent citizen should have regarding one of our important social institutions and at the same time to prepare a prospective teacher or administrator for the more technical training given in the Claremont Graduate School or in some other graduate institution.

Requirements for concentration: 24 units of work in courses numbered over 50, as prescribed below.

Prerequisite courses: Education 53a, 53b; Psychology 51a-b; Economics 51; Government 52; Sociology 51. *Required courses:* Education 104, 105, 151, 190; Sociology 106 or 109; Psychology 107, 108 (or equivalent course at Scripps College); Government 103. Courses beyond the concentration will vary with the individual student but the program should include further work in psychology and sociology as well as some contact with such fields as: art, English, geography, history, life sciences, music, physical education, and speech. Students anticipating teaching in Southern California are urged to acquire some familiarity with the Spanish language. All students considering teaching as a career should study the section on "Teaching and Educational Administration" on page 84.

53b. INTRODUCTION TO EDUCATION. *Mr. Lee*. The basic course in Education, designed for those who desire an understanding of the place and function of education in America today. An introductory study of the educational programs and processes in a democracy and the fundamental responsibility of the citizen for their effective operation. While the listed order is preferable, the two halves of the course may be taken in either order. 3 units. *TThS*, 8.

54. HISTORY OF EDUCATION: EUROPEAN AND COMPARATIVE. *Mr. Lee*. A study and appraisal of the European roots of contemporary American educational traditions and practices, with some attention to the contemporary educational policies and practices in foreign countries. History 1 and 55 or equivalent and Education 53 recommended as preparation. 3 units. First semester. *MWF*, 10.

55. HISTORY OF EDUCATION: UNITED STATES. *Mr. Lee*. A study of the growth and evolution of education in the United States. Stress is placed upon the intellectual, social, and economic forces which shaped educational develop-

ments. History 1 and 55 or equivalent and Education 53 and 104 recommended as preparation. 3 units. Second semester. *MWF, 10.*

151. INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. *Mr. Lee.* A study of the major philosophical foundations of contemporary American education. Both the contributions of historical philosophies and contemporary developments in educational thought will be examined. An attempt to answer the question: What kind of education for modern America? 3 units. First semester. *TThS, 10.*

190. COMPREHENSIVE SEMINAR IN EDUCATION. *Mr. Lee.* A seminar for seniors concentrating in education, designed to synthesize and supplement the several courses required for the major, to prepare for the comprehensive examination and for graduate professional study. Selected educational problems will be considered through independent research, observation, and discussion. 3 units. Second semester. *T, 2:15* and arranged.

THE TEACHING OF MATHEMATICS. For description see Mathematics 228.

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A wide range of graduate work in Education leading to the various credentials as well as to the degree of Master of Arts is offered under the auspices of the Claremont Graduate School.

English

English 1 or its equivalent is prerequisite for all other departmental courses. English 50 and History 1 are required of all students intending to concentrate in the Department of English.

A reading knowledge of at least one language and literature other than English, as well as high school preparation in Latin, is strongly recommended. In most graduate schools, candidates for the degree of Doctor of Philosophy are required to have a reading knowledge of *two* foreign languages.

Electives should be chosen, in consultation with the adviser, from courses in Speech and Dramatics, foreign literature, the history of England, the history of philosophy, and (especially for students interested in writing) elementary applied art.

Transfer students may offer equivalent courses pursued at other colleges in fulfillment of these requirements and recommendations.

CONCENTRATION WITH EMPHASIS ON LITERATURE

Students who are concentrating in literature must choose from each of the four groups below at least the number of units specified:

Group I (9 units): ENGLISH 101 or 155 or 153 or 154.

Group II (6 units): ENGLISH 103 or 105.

Group III (6 units): ENGLISH 104 or 192 or 193.

Group IV (6 units): ENGLISH 194 and 195.

A brief reading list, designed to acquaint students with the major figures in literature, will supplement course assignments in the program of concentration. The books on this list, many of which will already have been read in course, will be included in the comprehensive examination.

CONCENTRATION WITH EMPHASIS ON WRITING

The following pattern of courses must be completed, for a total of at least 27 units, by students concentrating in writing:

1. Upper-division courses in composition (111, 151; Speech and Dramatics 112): 6 to 12 units. Note that certain courses in composition may be repeated for credit under proper conditions.
2. English 101 or 153 or 154 or 155: 6 units.
3. English 103 or 104 or 105 or 194: 6 to 9 units.
4. English 192 and 193: 6 units.

A course in elementary applied art, taken in the Freshman or Sophomore year, is strongly recommended to students who intend to concentrate with an emphasis on writing.

A list of readings, stressing the principles of literary criticism and illustrating the theory and techniques of writing, will supplement regular coursework in this program of concentration.

Information concerning Honors programs and projected graduate work in English may be had from the Departmental Staff.

1a, 1b. ENGLISH: AN INTRODUCTORY COURSE. *Departmental Staff*. A brief review of the fundamentals of composition; instruction and practice in writing; reading and study of a few important literary types. Normally prerequisite for all other departmental courses. Students with marked deficiencies in the use of English may be required to meet for a fourth hour (arranged). 3 units. Section meetings *MWF*, 8; *TThS*, 8; *MWF*, 9. Section of 1b first semester for specially qualified students *TThS*, 9.

50a, 50b. GREAT ENGLISH AUTHORS. Mrs. Jordan, Mr. Purpus, Mr. Weismiller. A study of selected works of poetry and prose as representative major contributions to the literature of our cultural heritage. First semester: Chaucer, Spenser, Milton, and readings in the English lyric. Second semester: Swift, Pope, Wordsworth, Carlyle, Arnold, Yeats, Eliot. No student will be admitted to the second semester of the course who has not completed English 50a or an equivalent. 3 units. *MWF*, 11; *TThS*, 9.

56. INTRODUCTION TO POETRY. Mr. Holmes. A study of the principal aims and techniques of poetry. Readings in a wide variety of poetic types. 3 units. First semester. *TThS*, 10.

57. INTRODUCTION TO DRAMA. Mr. Kocher. Great plays of various periods from the classic Greek to the present day; as extensive reading as time will permit. 3 units. First semester. *MWF*, 10.

58. INTRODUCTION TO PROSE FICTION. *Mr. Fussell, Mr. Beatty.* A general survey of important works in prose fiction with emphasis upon selected novels—English, American, and continental—from the eighteenth century to the present. 3 units. Second semester. *MWF, 10; TThS, 9.*

63. EXPOSITORY WRITING. *Mr. Bracher.* A course in the principal methods used in explaining processes, theories, and the results of special investigations. The course is designed to meet the needs of the student who wishes further practice in expository writing, especially the student who is preparing for a career in business or one of the professions, such as law, medicine, or scientific research. Enrollment limited to 25 students. 3 units. Second semester. *T, 1:15-3:05, and Th, 1:15.*

64. NARRATIVE AND DESCRIPTIVE WRITING. *Mr. Weismiller.* A course for students who, having shown some ability as writers in English or its equivalent, wish to continue with the basic creative problems of narration and description. Laboratory exercises, assigned problems, and discussion. This course is a prerequisite for English 111 and 151. Enrollment limited to 25 students each semester; if the registration for the course exceeds this number, the selection of the students to take the course will be made after the first class meeting. 3 units. First semester, *TThS, 9*; second semester, *TThS, 10.*

ADVANCED COURSES

English 1 or an equivalent is prerequisite for all advanced courses in English.

101a, 101b. THE RENAISSANCE IN ENGLAND. *Mr. Strathmann.* English literature of the Renaissance, chiefly non-dramatic, with emphasis upon Renaissance thought and the development of English literary forms. In the first semester the principal writer studied is Spenser; in the second semester, Milton. 3 units. *MWF, 9.*

103a, 103b. LITERATURE OF THE EIGHTEENTH CENTURY. *Mr. Bracher.* A survey of English literature from 1660 to 1800. Main topics: first semester, Restoration drama, neo-classic literary theory, the works of Dryden, Swift, and Pope; second semester, the beginnings of the novel, pre-romantic poetry. Dr. Johnson and his circle. 3 units. *MWF, 10.*

104a, 104b. LITERATURE OF THE NINETEENTH CENTURY. *Mr. Fussell, Mr. Mulhauser.* An intensive study of the major poets and prose-writers of the period, with emphasis on literature as (1) an artistic expression of the life, emotions, and ideas of the individual writer, and as (2) a reflection of the important, intellectual, historical, and literary movements of the century. First semester, writers of the Romantic period; second semester, writers of the Victorian period. 3 units. *TThS, 9.*

105a, 105b. AMERICAN LITERATURE. *Mrs. Jordan, Mr. Holmes.* The literature of the United States, from the colonial period to the twentieth century, with

emphasis upon the development of a national culture. Representative writers studied are, in the first semester, Edwards, Irving, Cooper, Emerson, Thoreau, and Hawthorne; in the second semester, Poe, Melville, Whitman, Mark Twain, Henry James, and Dreiser. 3 units. *TThS*, 10.

111. THE SHORT STORY. *Mr. Weismiller*. Practice in the writing of short stories and sketches. Consideration of the critical principles of the short story and criticism of both student and professional work. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students. Prerequisite: English 64 and permission of the instructor. 3 units. First semester. *T*, 1:15-3:05, and *Th*, 1:15.

151. CREATIVE WRITING. *Mr. Weismiller*. Supervised practice in the forms of creative writing, selected according to the needs and abilities of the students enrolled in the course. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students. Prerequisites: English 64 and permission of the instructor. 3 units. Second semester. *T*, 1:15-3:05, and *Th*, 1:15.

153. CHAUCER. *Mrs. Jordan*. A study of Chaucer as the outstanding narrative and dramatic poet of the transition from the medieval to the modern world. 3 units. Second semester. *MWF*, 9.

154. THE ENGLISH LANGUAGE. *Mr. Bracher*. A survey of the English language from its origins to the present. Principles of linguistic change, as an aid to the understanding of modern English usage. Especially recommended to prospective teachers. 3 units. First semester. *MWF*, 9.

155a, 155b. SHAKESPEARE. *Mr. Strathmann*. A study of the principal plays and of Shakespeare's career as a dramatist, with attention to the working conditions of the Elizabethan stage and collateral reading in dramatists contemporary with Shakespeare. First semester, mainly comedies and histories; second semester, mainly tragedies. 3 units. *MWF*, 11.

192. CONTEMPORARY NOVELISTS. *Mr. Mulhauser*. A study of the novels of James, Lawrence, Joyce, Woolf, and Faulkner, with emphasis upon the principles of narrative art and the philosophical points of view of these novelists. 3 units. Second semester. *MFW*, 10.

193. CONTEMPORARY POETS. *Mr. Weismiller*. Poets of the twentieth century, Gerard Manley Hopkins to the present, studied in the light of the great poetic tradition. 3 units. First semester. *MWF*, 10.

194. LITERARY CRITICISM. *Mr. Fussell*, *Mr. Holmes*. A study of the principles of literary criticism. Selected readings in the masterpieces of criticism from ancient times to the present, with emphasis on the theories and forms of poetry, fiction, and drama. 3 units. First semester. Two sections: *WF*, 2:15-3:30.

195. READINGS IN ENGLISH LITERATURE. *Mr. Holmes, Mr. Fussell.* A seminar open to seniors concentrating in English. Lectures, readings, and reports directed toward a synthesis, on the student's part, of his work in English. 3 units. Second semester. Two sections: *WF, 2:15-3:30.*

196. PROBLEMS OF WRITING. *Mr. Weismiller.* A specialized course in advanced composition; group and individual conferences. Prerequisites: English 64, 111 and 151 and permission of instructor. 1 or 2 units. Second semester, one hour a week. Arranged.

CHARACTER PRESENTATION IN DRAMATIC LITERATURE. For description see Speech and Dramatics 61a, 61b.

PLAYWRITING. For description see Speech and Dramatics 112a-112b.

AVAILABLE AT SCRIPPS COLLEGE

I-116a, b. SHAKESPEARE. *Mr. Gray, Mr. Hard.* Year course. *MWF, 11.* Credit will not be given for both I-116 and 155.

I-119. ADVANCED WRITING. *Mr. Armour.* Registration limited. Year course *TThS, 10.*

I-141a, b. AMERICAN SOCIAL LITERATURE. *Mr. Foster.* Year course. *MWF, 11*

I-144. THE ROMANTIC POETS. *Mr. Armour.* Year course. *MWF, 8.* Credit will not be given for I-144 and English 104a.

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The opportunity for graduate work in English provided in the Claremont Graduate School is quite extensive. The student who purposes to go on into graduate study is advised to plan his whole course from at least as early as his junior undergraduate year.

Geography

AVAILABLE AT SCRIPPS COLLEGE

V-103. THE NATURAL SETTING OF THE SOUTHWEST. *Miss Smith.* First semester. (Continuation in second semester by permission only.) *TTh, 2:15-4:05.*

Geology

Geology 1 is an introductory survey course. It is designed to give a general appreciation of the features and processes at the earth's surface to the non-technical student and is a prerequisite for most of the more advanced work in the department. The other courses are designed for persons intending to specialize in geology or a related science.

A student concentrating in geology should include courses 1, 2, 59, 102, 110, 112, 181, 182, an approved summer field course, and either 107 or 151.

Required in other departments: Mathematics 1, 65; Physics 51; Chemistry 1, and a reading knowledge of German, Spanish or French (German preferred). Geology 161 and Pre-Engineering 7 and 40 are desirable. In exceptional cases courses in biology may be substituted for those in physics and chemistry. Rarely the requirement of a summer field course is waived.

Seniors graduating in geology must write an acceptable thesis based on work done in Geology 181, 182, and take a 2 or 3 hour written examination on the fundamentals of geology, followed by a brief oral examination on topics suggested by the thesis or the examination paper.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 102; Geology 59, 110, and 112, plus 11 additional upper-division units selected from Astronomy 103 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 151. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

101a-1b. INTRODUCTION TO GEOLOGY. *Mr. Shelton.* A survey of geologic principles and processes, and of earth history. Must be accompanied by Geology 2. 3 units. *MWF, 10.*

101a-2b. LABORATORY AND FIELD TRIPS SUPPLEMENTING GEOLOGY 101a-1b. *Staff.* Open to students who are taking or have taken Geology 1 or its equivalent. Prerequisite for all more advanced courses in geology except 59. Fee \$3.00 each semester. 1 unit. *W or Th, 1:15-4:05.*

59. MINERALOGY, INCLUDING CRYSTALLOGRAPHY. *Mr. Woodford.* Prerequisite, high school chemistry or equivalent. Two class and two laboratory periods. Laboratory fee \$4.00. 4 units. First semester. Class *WF, 11;* laboratory, *T and F, 1:15-4:05.*

102. ELEMENTARY FIELD GEOLOGY. *Mr. Shelton.* Field methods; geologic mapping; spring recess trip; writing of geologic reports. Prerequisite: Geology 101, completed or in progress. Desirable, Geology 112. Second semester. 3 units. Arranged.

104. FIELD GEOLOGY. *Mr. Shelton.* A summer field course in geologic mapping. 6 units. Prerequisite: Geology 102 and 110.

107a-107b. INVERTEBRATE PALEONTOLOGY. *Mr. Woodford.* Prerequisite, Geology 1 and 2. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$6.00 each semester. 3 units. Arranged.

110. PETROLOGY. *Mr. Woodford.* The study of rocks without the aid of a polarizing microscope. Prerequisite: Geology 1, 2 and 59. Second semester. Two class and two laboratory periods. 4 units. Laboratory fee \$4.00. *WF, 11,* laboratory, *T and F, 1:15-4:05.*

112. STRUCTURAL GEOLOGY. *Mr. Shelton.* Structural features of sedimentary, igneous and metamorphic rocks; deformation of the earth's crust; practice in laboratory methods for dealing with geological problems in three dimensions. Prerequisite: Geology 110. First semester. Two class and one laboratory periods. 3 units. Laboratory fee \$4.00. Arranged.

151a-151b. PETROGRAPHY. *Mr. Shelton.* The optical properties of crystals; study of minerals and rocks with the petrographic microscope. Prerequisite: Geology 110. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$5.00 first semester; \$8.00 second semester. 3 units. Arranged.

161a, 161b. ADVANCED GENERAL GEOLOGY. *Mr. Woodford.* History of geology, weathering, sedimentary rocks, geomorphology, geologic time, volcanology, ore deposits. Prerequisites: Geology 110, one year of college mathematics, and physics and chemistry of high school or college grade. Three class periods, or two classes and one laboratory each week. 3 units. Arranged (Omitted in 1952-53.)

181, 182. GEOLOGICAL INVESTIGATION AND RESEARCH. *Staff.* 3 units. Laboratory fee \$4.00 each semester. Arranged.

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Graduate work in Geology with special reference to Petrography is offered under the auspices of the Claremont Graduate School.

German

A program of concentration in German consists of a minimum of 18 units in courses numbered above 100 and 6 additional units in German or in a related field selected according to the student's needs and interests. Special program for students interested in German Literature, translation, library work, or post graduate work in German can be had from the department.

1a-1b. ELEMENTARY GERMAN. *Mr. Baumann, Miss Wagner.* The acquirement of a small working vocabulary. Constant ear-training, and as much practice in speaking as time permits. Daily exercises in reading and writing. The essentials of grammar. Etymology. Comment on German life. 3 units. *MWF, 9, 11; TThS, 9.*

53a-53b. ADVANCED GERMAN. *Mr. Baumann.* More advanced German language study through intensive reading of selected German works, with collateral reading in the field of the student's individual interest—literary, social, or scientific. Continued practice in German conversation. Some attention to an understanding of the cultural life of Germany, Austria, and Switzerland. Prerequisite, German 1 or an equivalent. 3 units. *TThS, 9*

102a, 102b. ADVANCED CONVERSATION, READINGS AND TRANSLATION. *Miss Wagner*. Intensive critical readings of masterpieces of the eighteenth and nineteenth centuries. Drill in written and oral expression. This course is also designed for those interested in translating and summarizing in English reports given in German. Prerequisites, German 53 or equivalent. 3 units. *TThS, 10.*

109a, 109b. GERMAN LITERATURE OF THE NINETEENTH CENTURY. *Miss Wagner*. With special reference to the cultural, economic and political history of Germany. Discussion and papers. Prerequisite, German 53 or equivalent. 3 units. *MWF, 10.*

113a, 113b. GERMAN CLASSICS OF THE EIGHTEENTH CENTURY. *Miss Wagner*. A study of the outstanding works and personalities of the period with particular attention to the social and political life of Germany. Prerequisite, German 53 or equivalent. 3 units. *MWF, 10.* (Omitted in 1952-53.)

158a, 158b. MODERN GERMAN LITERATURE. *Mr. Baumann*. The development of German Literature from 1880 to the present with reference to the political and social changes during that period. 3 units. Arranged.

160a, 160b. SURVEY OF GERMAN LITERATURE. *Mr. Baumann*. The development of German Literature from earliest times to the present. 3 units. Arranged. (Omitted in 1952-53.)

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Under the auspices of the Claremont Graduate School graduate work is offered in various phases of German Literature with special emphasis on the modern field.

Government

In addition to preparation for more effective citizenship, concentration in Government is suggested for students planning careers in law, teaching, journalism, research, public relations, civil service or the foreign service. The department will gladly advise students regarding opportunities in these fields and will assist in developing programs of study designed to meet basic requirements.

General Requirement: Government 51 and 52 are normally prerequisite for all other courses in the Department. Exceptions should be cleared with the departmental staff.

Lower Division Prerequisites for Concentration: The following courses should be completed by the end of Sophomore year: History 1; Government 51, 52; Economics 51, 52. The introductory course in Sociology is strongly recommended and also the elementary course in statistics and a semester of accounting.

Program of Concentration: A minimum of 24 upper division units in Government, including in each case Government 104, 125, 154, 157, 182, 183, and 6 upper division units from one of these fields: Economics, History,

Sociology. These combinations are especially recommended: in Economics 103 and 109 or 104 and 110; in History 107a, b, 113a, b; Sociology 102 and 111. Each student's program shall be arranged in consultation with the departmental staff. A reading and speaking knowledge of at least one modern foreign language is strongly advised, particularly for students having an intention whatever of seeking positions in foreign service or foreign trade.

Junior Transfers: Students transferring to Pomona at the beginning of the Junior year are eligible to concentrate in Government, provided the prerequisites are met before entrance or can be met during the Junior year.

Three Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three-year program enabling them to earn both the B.A. and M.A. degrees. In addition, the Claremont Summer Session, sponsored jointly by the four Associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them, within the three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

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AMERICAN ECONOMIC AND POLITICAL INSTITUTIONS

Pomona College believes that its graduates should be familiar with the economic and political foundations of American life. To this end the Departments of Economics and Government have organized a year course in American economic and political institutions through which students who cannot take a full year in each subject may nevertheless gain some understanding of both fields. This course combines a semester's study of economics with another semester devoted to American Government and the formal classwork is supplemented by a series of special lectures which all students are expected to attend. These lectures (which are open to other students and faculty as well) are designed to present the insights of persons who have had practical experience in business and government and the speakers are chosen from leaders in government, industry, finance, labor and law.

That part of the course pertaining to economic institutions (Economics 51) is offered only during the fall term and that pertaining to politics (Government 52) only in the spring but students may begin the course at whichever time best suits their schedules. The combined course may be offered in fulfillment of one of the requirements for distribution in the lower division. For outline of contents and time schedule see regular course descriptions under the respective departments.

GOVERNMENT

Government 51. INTRODUCTION TO POLITICAL SCIENCE. *Staff.* The aims of this course are to survey principles, processes and institutions which are essential

for a mature understanding of the problem of government in the modern world; to take note of the mutual interdependence of the several social sciences; and to describe the use of objective methods in political analysis. 3 units. First semester. *MWF, 8, 11; TThS, 9, 10.*

Government 52. *AMERICAN GOVERNMENT. Staff.* A study of the American system of constitutional government, mainly on the national level but with some attention to the powers and functions of states, counties, and cities. Emphasis is given to the U. S. Constitution, democracy, federalism, and the functions of Congress, the Executive Branch and the Federal Courts. May be combined with Economics 51 to enable students who cannot devote more than six hours to the two fields to do some basic work in each. 3 units. Second semester. *MWF, 8, 11; TThS, 8, 9, 10.*

Advanced Courses

Government 51 and 52 together comprise the foundation course in government and are normally prerequisites for all advanced courses. Exceptions should be cleared with the departmental staff. Required of all majors in government or international relations.

103. *STATE AND LOCAL GOVERNMENT. Staff.* An examination of trends and problems, both political and administrative, in state and local government, with particular reference to California. Special attention given to needs of students interested in education and municipal management. 3 units. Second semester. *TThS, 10.*

104. *PRINCIPLES OF ADMINISTRATION. Mr. McDonald.* A study of the forms and modes of responsible administration in American government including the theory and practice of organization, fiscal and personnel management, measurement of administrative efficiency, public relations and comparisons with business management. 3 units. Second semester. *MWF, 9.*

105. *INTRODUCTION TO LAW. Mr. Lee.* The nature of law, public and private, with emphasis upon cases and materials illustrating the development of Anglo-American institutions. Some attention to theories of law or jurisprudence. A background for the professional study of law. 3 units. First semester. *MWF, 10.*

106. *BUSINESS LAW. Mr. Darby.* A survey of the law of contracts, agency, sales, negotiable instruments and other matters normally arising in the course of business. 3 units. First semester. *MWF, 8.*

110. *PROBLEMS IN ADMINISTRATION. Mr. Vieg.* Intensive study of selected problems in local, state, national or international administration. An advanced course designed primarily for students preparing for government service or for graduate work in public administration. 3 units. (Omitted in 1952-53.)

125. *MODERN DEMOCRACIES. Mr. Lee.* A comparative study of political institutions in contemporary democratic states, including Great Britain, Canada, France, Switzerland, and one of the Scandinavian countries. 3 units. First semester. *TThS, 10.*

126. SOVIET IDEOLOGY AND INSTITUTIONS. *Mr. McDonald.* An analysis of the assumptions, institutions and processes of Soviet life and a study of the evolution of Soviet politics, economics, and diplomacy from 1917 to the present. 3 units. Second semester. *TThS*, 10.

154. AMERICAN CONSTITUTIONAL LAW. *Mr. Darby.* An analytical and historical examination of the nature and extent of constitutional power in the United States. The separation of powers doctrine; federal-state relations; the powers of Congress and the President; constitutional guarantees of the right of individuals; suffrage, citizenship, and the civil liberties—religion, speech and press. Principal emphasis will be placed on Supreme Court cases. 3 units. Second semester. *MWF*, 10.

157. PARTIES AND PRESSURE GROUPS. *Mr. McDonald.* A study of the role of parties and pressure groups in democratic government, the nature of the American party-lobby system, party platforms and leaders, tactics of pressure group and the problem of civic indifference. 3 units. First semester. *MWF*, 9.

160. PUBLIC OPINION AND PROPAGANDA. The role of individual and group opinion in the modern state and world community, with particular consideration of propaganda and other pressure techniques developed to influence this opinion. Contemporary problems will be emphasized. 3 units. Second semester. (Omitted in 1952-53.)

161, 162. READINGS AND RESEARCH IN GOVERNMENT. *Staff.* Reading program for students capable of independent study in fields of special interest not included within the scope of regular courses including, when opportunity offers, research in nearby governmental agencies. Each program must be approved in advance by some member of the Departmental staff. 2 or 3 units. Arranged.

165. AMERICAN FOREIGN RELATIONS. *Mr. Darby.* An historical study of the principal aspects and problems of American foreign policy since the Revolution and a critical analysis of the formulation, content and direction of policy at the present time. Attention will be given to the part played by the President and the Congress in the conduct of foreign affairs. 3 units. First semester. *TThS*, 9.

167. INTERNATIONAL POLITICS AND ORGANIZATION. *Mr. Darby.* A survey of the realities of recent international politics accompanied by an extensive examination of the organization and functions of the League of Nations, the United Nations, the North Atlantic Treaty Organization and other regional arrangements for collective security. 3 units. Second semester. *TThS*, 9.

180. READINGS IN MODERN SOCIAL INSTITUTIONS. *Staff.* A program of directed reading designed to give the student concentrating in Modern Social Institutions an understanding of relationships among institutions, of their achievements and problems, and of their role and importance in contemporary American life. The reading will culminate in a written project. 3 units. First semester. Arranged.

181. AMERICAN POLITICAL IDEAS AND INSTITUTIONS. *Mr. Lee.* A pro-seminar on the political concepts, institutions, and processes evolved by the American people from colonial times to the present. Emphasis is placed upon "free government in the making." Required of all students concentrating in Modern Social Institutions; also open to other qualified upper-division students. 3 units. Second semester. Arranged.

182. HISTORY OF POLITICAL THOUGHT. *Mr. Jones.* A study of the major political philosophers in Western civilization from Plato to and including Bentham. 3 units. First semester. *MWF, 2:15.*

183. PHILOSOPHY AND SCIENCE OF GOVERNMENT. *Mr. Lee.* A survey of recent political theory, a review of politics, administration and law, and an analysis of scientific method in social study. 3 units. Second semester. *MFW, 11.*

Honors Study

Students of marked capacity are invited to arrange with the Department for enrollment in programs of independent study culminating in the presentation of a dissertation on some subject of special interest and significance. One half of the minimum requirement of 12 units may be met by Government 182 and 183 which together constitute the Senior seminar.

STATISTICS FOR SOCIAL SCIENTISTS. For description see Economics 57.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ADMINISTRATIVE ORGANIZATION IN BUSINESS AND GOVERNMENT. *Mr. Benson.* 3 units. First semester.

PERSONNEL ADMINISTRATION. *Mr. Phelps.* 3 units. Second semester.

SEMINARS OFFERED BY DEPARTMENTAL STAFF IN THE CLAREMONT GRADUATE SCHOOL

182. AMERICAN CONSTITUTIONAL DEVELOPMENT. *Mr. Darby.*

183. PUBLIC OPINION AND PUBLIC POLICY. *Mr. Lee.*

For other seminars open to qualified seniors consult the catalog of The Claremont Graduate School and confer with the Department.

History

General requirement: History 1, or its equivalent, is a prerequisite for all other courses in history.

Concentration requirements: Students planning to concentrate in History are required to take History 1, 55, 140 and 190, as well as one semester of a pro-seminar in History. They should also take Government 51, 52 and Economics 51, 52 during the Freshman and Sophomore years. During Junior and Senior years, in addition to History 140, History 190, and

the proseminar, they are required to take at least 12 additional units of upper division courses in History, and at least 6 units of upper division courses in a related field such as Economics, Government, Sociology, Religion, Literature or Philosophy. A knowledge of foreign languages is of great value to students of history, and all concentrators are urged to achieve such proficiency. Most graduate schools require a reading knowledge of one foreign language for the M.A. and of two for the Ph.D. The courses in any program of concentration should be carefully integrated, and should be planned in consultation with a member of the History Department. All concentrators in History will write three examinations of a comprehensive nature near the end of Senior year. One of these will be the same for all concentrators in History, and will deal with the field as a whole, its point of view and method. In addition, each concentrator will select two from the following subjects in which to be examined: Ancient History; Europe, 312-1648; Europe since 1648; the United States; Latin America; the Far East.

Honors requirements: A student admitted to Honors Study in the Social Sciences with History as his major field will, in addition to the program of reading and conferences arranged with the member of the department who acts as his adviser, participate in a seminar including the departmental faculty and students in Honors, which will meet for the presentation of reports and discussion. Juniors will register for 141; Seniors will register for 191. A Honors thesis is required of all students in this program, and, near the end of Senior year, there will be a series of written comprehensive examinations in the major and minor fields as well as an oral examination.

12-1b. THE DEVELOPMENT OF WESTERN CIVILIZATION. *The Department Staff.* The evolution of civilization in Europe from antiquity to the contemporary scene, and its spread throughout the world. Attention is paid to the political, religious, intellectual, and economic forces of change. The aim is to lay a foundation for the understanding of contemporary problems. 3 units. *MWF, 8, 9; TThS, 9.*

55a, 55b. HISTORY OF THE UNITED STATES. *Mr. Sweet.* The political, economic, and cultural development of the United States from its beginning as an outpost of European expansion to a position of independence and world influence. 3 units. *MWF, 11.*

101. HISTORY OF GREECE. *Mr. Carroll.* A survey of ancient Greece from the prehistoric age until the Roman conquest, with special emphasis on the development and decay of the city-state and of Athenian democracy. The social, economic, and intellectual history of the period will be considered within the political frame of reference. 3 units. First semester. *MWF, 10.* (Omitted in 1952-53.)

102. HISTORY OF ROME. *Mr. Carroll.* A study of Rome from the beginning of the city to the disappearance of the Empire. There will be special attention to the problems of imperial administration, the causes of the decline of the Empire, and the emergence of Christianity. 3 units. Second semester. *MWF, 10.* (Omitted in 1952-53.)

103a, 103b. HISTORY OF THE MIDDLE AGES. *Mr. Learnihan*. History of Europe from Constantine to Charles V, with special emphasis on the economic, political, intellectual, and religious developments and the institutions and ideals underlying the transition from Mediterranean to European civilization. The first semester covers the period 312-1054; the second semester 1054-1500. 3 units. (Offered in alternate years; omitted in 1952-53.) *MWF*, 9.

107a, 107b. HISTORY OF ENGLAND. *Mr. Gleason*. The development of the main features of civilization in the British Isles. Emphasis is laid upon the evolution of religious, intellectual, and economic forms as well as the growth of political institutions. Thus the course is largely a study of the cultural heritage of America. First semester, Great Britain to 1688. Second semester, Great Britain since 1688. 3 units. *MWF*, 11.

113a, 113b. EUROPE SINCE 1870. *Staff*. Political, economic, social, and intellectual developments will be studied with reference both to their intrinsic significance and to an understanding of contemporary Europe. Open to Sophomores who satisfy the instructor with regard to their preparation. 3 units. *MWF*, 10.

114. HISTORY OF RUSSIA. *Mr. Gleason*. A survey of Russian political, economic, and cultural history to 1917. This course may be followed by Government 126 to constitute a year's work in Russian History. 3 units. First semester. (Offered in alternate years; to be omitted in 1953-54.) *TThS*, 10.

117a, 117b. INTELLECTUAL HISTORY OF EUROPE. *Mr. Learnihan*. A study of the formation of the ideas and ideals significant in politics, religion, and science since classical times, their expression in literature and institutions, and their influence on the development of society. (Offered in alternate years; to be omitted in 1953-54.) *MWF*, 9.

120. THE WESTWARD MOVEMENT IN NORTH AMERICA. *Mr. Kemble*. A study of the migration of people, institutions, and ideas across the continent, from the establishment of the English colonies to the twentieth century. Some attention will be given to the parallel and overlapping movement of population in Canada. 3 units. Second semester. *MWF*, 8. (Omitted in 1952-53.)

121. A HISTORY OF IDEAS IN AMERICA. *Mr. Sweet*. An analysis of the main currents in the intellectual history of the United States. Prerequisite: a college course in American history, or the permission of the instructor. Second semester. 3 units. *MWF*, 9.

130. MODERN MARITIME AND NAVAL HISTORY. *Mr. Kemble*. A study of the development of sea power and commerce from the sixteenth century to the present. The growth and character of the great mercantile marines, the evolution of naval architecture, and the course and character of war at sea will be considered. 3 units. First semester. (Offered in alternate years; to be omitted in 1952-53.) *MWF*, 10.

132. THE HISTORY OF THE WEST COAST REPUBLICS OF SOUTH AMERICA. *Mr. Ferring*. Their colonial backgrounds and their development since independ-

ence. Open to Juniors and Seniors. 3 units. First semester. (Offered in alternate years; to be omitted in 1953-54.) *W*, 7:30-9:45 p.m.

133. THE HISTORY OF ARGENTINA AND BRAZIL. *Mr. Herring*. Open to Junior and Seniors. 3 units. Second semester. (Offered in alternate years; to be omitted in 1953-54.) *W*, 7:30-9:45 p.m.

134. THE HISTORY OF SPAIN AND PORTUGAL. *Mr. Herring*. Emphasis will be given to the period from the 13th to the 17th centuries, as background for the study of Latin America. Open to Juniors and Seniors. 3 units. First semester. (Offered in alternate years; to be omitted in 1953-54.) *Th*, 7:30-9:45 p.m.

135. THE COLONIAL PERIOD OF LATIN AMERICA. *Mr. Herring*. Some attention will be given to the Indian background. Open to Juniors and Seniors. 3 units. Second semester. (Offered in alternate years; to be omitted in 1953-54.) *Th*, 7:30-9:45 p.m.

136. THE HISTORY OF MEXICO FROM COLONIAL TIMES TO THE PRESENT DAY. *Mr. Herring*. Open to Juniors and Seniors. 3 units. First semester. (Offered in alternate years; omitted in 1952-53.) *W*, 7:30-9:45 p.m.

137. THE HISTORY OF CENTRAL AMERICA AND THE CARIBBEAN REPUBLIC. *Mr. Herring*. Open to Juniors and Seniors. 3 units. Second semester. (Offered in alternate years; omitted in 1952-53.) *W*, 7:30-9:45 p.m.

138a, 138b. STUDIES IN INTER-AMERICAN RELATIONS SINCE 1800. *Mr. Herring*. Open to Juniors and Seniors. 3 units. (Offered in alternate years; omitted in 1952-53.) *Th*, 7:30-9:45 p.m.

139a, 139b. STUDIES IN LATIN AMERICAN AND IBERIAN HISTORY. *Mr. Herring*. Additional readings and discussions designed to supplement History 132, 133, 134, 135, 136, 137, 138a, b and open with the permission of the instructor only to students enrolled in one of those courses. The class will meet, 5-6, on the same day as the course which it supplements. 1 unit.

140. THE STUDY OF HISTORY. *Mr. Learnihan*. An introduction to the mature study of history. Topics to be considered will include: the philosophy of history, schools of historical writing, historical bibliography, the technique of historical investigation, evidence and its interpretation. The course is designed and required for concentrators in history in the first term of Junior year, but other Junior and Senior students may be admitted with the permission of the instructor. 3 units. First semester. *TTh*, 2:15-3:45.

141a, 141b. HISTORY AND HISTORIANS. *The Departmental Staff*. A consideration of the theory and interpretation of History through the reading of a selected group of great historical classics, and a study of the development of historiography. Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T*, 7:30-9:30 p.m.

190. HISTORICAL PROBLEMS AND INTERPRETATION. *Mr. Gleason*. Readings and discussion of important aspects of European and American history. Consideration

tion of major historical developments and some of the most significant works dealing with the several fields of History. The course is designed and required for Seniors concentrating in History. Other Seniors may be admitted with the permission of the instructor. 3 units. Second semester. *MW*, 2:15 and arranged.

191a, 191b. SELECTED TOPICS FOR HISTORICAL INVESTIGATION. *The Departmental Staff*. Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T*, 7:30-9:30 p.m.

PRO-SEMINARS

The following courses are designed primarily for concentrators in history. Other students will be admitted with the permission of the instructor. It is intended to offer at least one pro-seminar in European and one in United States history each year, but the subjects studied may vary from time to time. Similar instruction in the history of Latin America and the Far East is available for Pomona Seniors in the offerings of Claremont Graduate School.

162. HISTORY OF THE RENAISSANCE AND REFORMATION. *Mr. Gleason*. An analysis of the transition from Medieval to Modern Civilization. Intellectual, social, economic, and particularly religious developments will be studied from their early manifestations in fourteenth century Italy to their culmination in northwestern Europe in the seventeenth century. 3 units. Second semester. (Offered in alternate years; to be omitted in 1952-53.) *MW*, 2:15 and arranged.

165. NINETEENTH CENTURY EUROPE. *Mr. Gleason*. A number of topics selected in accordance with the particular interests of the members of the class will be studied more thoroughly than is possible in a lecture course. Each student will work on several topics and maximum use of original materials will be made. First semester. *MW*, 2:15 and arranged.

68. CONTEMPORARY MIDDLE EUROPE. *Mr. Meyer*. The effects of the two world wars upon mid-European society, and the struggle for supremacy between democracy, fascism, and communism. Prerequisite: History 113a, b. 3 units. First semester. (Offered in alternate years; to be omitted in 1952-53.) *ThS*, 10.

70. HISTORY OF WESTERN AMERICA. *Mr. Kemble*. The exploration, economic exploitation, and settlement of Western North America by Spaniards, Russians, and Anglo-Americans. Attention is given to the evolution of political, cultural, and economic institutions, and the opening of routes of communication. Lectures and directed research in the splendid materials contained in the Henry R. Wagner Collection of History and Cartography of the North Pacific and the Mason Library of California and Western American History. 3 units. Second semester. (Offered in alternate years; to be omitted in 1952-53.) *MW*, 2:15 and arranged.

172. AMERICAN CIVILIZATION, 1763-1828. *Mr. Sweet*. A study of significant aspects of American political, economic, and intellectual history between the closing years of the Colonial Period and the Age of Jackson. 3 units. First semester. (Offered in alternate years; to be omitted in 1953-54.) *MW*, 2:10 and arranged.

HISTORY OF CHINA. For description see Oriental Affairs 103a, 103b.

JAPANESE HISTORY AND CULTURE. For description see Oriental Affairs 111.

AVAILABLE AT SCRIPPS COLLEGE

III-100. ECONOMIC CHANGE IN THE UNITED STATES. *Mr. Britt*. Year course *TThS*, 10.

III-106. PROBLEMS OF INTERNATIONAL RELATIONS. *Mr. Mann*. First semester *MWF*, 8.

III-107. THE INTERPRETATION OF HISTORY. *Mr. Mann*. Second semester *MWF*, 8.

III-118. AMERICAN INTELLECTUAL AND CULTURAL HISTORY. *Mr. White*. Year course. *TTh* and arranged.

V-114. PROGRESS AND MEANING OF THE SCIENCES. *Miss Smith*. Year course. Arranged hours.

SENIOR HUMANITIES. *Staff*. Discussion of the contemporary American scene. Year course. *MWF*, 9.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

These offerings are designed primarily for graduate students, but are open to qualified Seniors by permission of the chairman of the department and the instructor.

201. STUDIES IN EUROPE SINCE 1914. *Mr. Cooke*. Second semester. 5 units. *W*, 4-6 and 7:30-9:30 p.m.

209. AMERICAN DIPLOMATIC HISTORY. *Mr. Cooke*. First semester. 5 units. *Th*, 4-6 and 7:30-9:30 p.m.

228a, 228b. THE UNITED STATES IN THE TWENTIETH CENTURY. *Mr. Bradley*. 5 units. *MTh*, 8-10 p.m.

Mathematics

Requirements for concentration: In addition to the basic courses of Mathematics 1a, b or 52a, and 65a, b, it is necessary to take the following courses: Mathematics 118, 119, 125, 151a, b, and at least three more upper division or graduate units in the department of Mathematics*. The remaining six units may be taken in Mathematics* or selected from Physics 113a-b, 191a, Astronomy 155.

*Mathematics 228 may not be offered in fulfillment of requirements for concentration.

Mathematics 1a, b is normally prerequisite for all other work in the department. Students who have had trigonometry in high school may take an examination in mathematics on the Saturday preceding registration. If a satisfactory grade is made on this examination, the student may enroll in Mathematics 52a if he so desires.

1a, 1b. INTRODUCTION TO COLLEGE MATHEMATICS. *Departmental Staff*. While this course prepares students for work in the calculus, it is at the same time comprehensive enough to provide in itself a general mathematical background. It is designed for students who have not had trigonometry, but is open to students who do not wish or are not able to qualify for the alternative described above. It includes college algebra, trigonometry, and an introduction to analytic geometry and calculus. 3 units. *MWF, 10; MWF, 11; TThS, 9.*

52a, 52b. PLANE AND SOLID ANALYTIC GEOMETRY. *Mr. Tolsted*. First semester: straight line, conic sections, higher plane curves in various coordinated systems. Second semester: planes, curved surfaces, space curves, mathematical logic and non-Euclidean geometries. Prerequisite to 52b is either Mathematics 1 or 52a. Credit will not be given for both Mathematics 1 and 52a. 3 units. *MWF, 11.*

65a, 65b. DIFFERENTIAL AND INTEGRAL CALCULUS. *Staff*. This is a standard course in the theory and application of the calculus. Prerequisite Mathematics 1 or 52a. 3 units. *MWF, 9; TThS, 9.*

18. HIGHER ALGEBRA. *Mr. Jaeger*. Permutations, combinations, probability, binomial and multinomial theorems, summation of series, and other algebraic topics. Prerequisite Mathematics 65 or permission of instructor. 3 units. First semester. *TThS, 10.*

19. THEORY OF EQUATIONS. *Mr. Tolsted*. The theory and solution of algebraic and transcendental equations; determinants and matrices. Prerequisite Mathematics 65 or permission of instructor. 3 units. Second semester, *TThS, 10.*

25. INTERMEDIATE CALCULUS. *Mr. Hamilton*. Topics not taken up in Mathematics 65, with special emphasis on multiple integrals, partial differentiation, and series with applications of each of these. Prerequisite Mathematics 65. 3 units. First semester. *MWF, 9.*

51a, 151b. DIFFERENTIAL EQUATIONS. *Mr. Hamilton*. A general course in the theory, solution, and application of differential equations. Mathematics 125 must be taken before or concurrently with this course. 3 units. *MWF, 8.*

52a, 152b. ADVANCED CALCULUS. *Mr. Tolsted*. Limits, sequences, continuity, improper integrals, uniform convergences, Taylor and Fourier series, partial derivatives, multiple integrals, line and surface integrals, Green and Stokes theorems. 3 units. *TThS, 9.*

85. VECTOR ANALYSIS. *Mr. Hamilton*. Algebra and calculus of vectors; divergence and Stokes' theorems. 3 units. First semester. *MWF, 11.*

94. MATHEMATICAL STATISTICS. *Mr. Hamilton*. The mathematical basis for statistical theories and methods with applications from various fields. Prerequisite, Mathematics 65a, b. 3 units. First semester. *MWF, 10.*

195a, 195b. ACTUARIAL MATHEMATICS. *Mr. Jaeger*. Finite differences, interpolation formulas, approximations, summations, probability. Prerequisite Mathematics 65 and 118. 3 units. Arranged. (195b omitted in 1952-53.)

198a, 198b. SELECTED TOPICS IN HIGHER MATHEMATICS. *Staff*. Special work or reading not included in the preceding will be offered in this course. 3 units. Arranged.

MATHEMATICAL PHYSICS. For description see Physics 191a-191b.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

The following courses, listed among the offerings of the Claremont Graduate School, are open to superior undergraduates who have satisfied the prerequisites.

200a, 200b. NUMBER THEORY. *Miss Walton*. Properties of integers, linear and quadratic congruences, and algebraic numbers. Prerequisite Mathematics 65. 3 units. *MWF, 10*. (Omitted in 1952-53.)

205a, 205b. DIFFERENTIAL GEOMETRY. *Mr. Tolsted*. The study of curves and surfaces in three dimensional Euclidean space, introducing the tensor calculus (the principal mathematical tool in the study of the theory of relativity). Prerequisites Mathematics 52b or equivalent and Mathematics 152. 3 units. Arranged.

210a, 210b. COMPLEX VARIABLE. *Mr. Hamilton*. Algebra and calculus of complex variables; infinite series; Cauchy's Theorem and consequences including Taylor and Laurent expansions and classification of singularities entire functions; meromorphic functions. Prerequisite, Mathematics 152. 3 units. Arranged. (Omitted in 1952-53.)

215a, 215b. REAL VARIABLE. *Mr. Tolsted*. Fundamentals of the theory of functions of a real variable. Introducing abstract spaces, measure theory, and Lebesgue integration. Prerequisite, Mathematics 152. 3 units. (Omitted in 1952-53.)

228. THE TEACHING OF MATHEMATICS is offered during the Claremont Summer session.

PRE-ENGINEERING

In the following courses three hours of work per week are required for each unit. It is necessary that the student attend class on the hour agreed upon for the lecture, but it is not mandatory that the laboratory work be done in only one or two periods. Credit will not be given for only 1 unit of work.

The letters a, b, c, d, refer to units of work, each letter being associated with one unit. All units are available each semester. A student may enroll in any unit for which he is qualified.

7a, 7b, 7c, 7d. **ENGINEERING DRAWING.** *Mr. Burnham.* A beginning course in mechanical drawing and applied geometry. Includes lettering, orthographic projection, visualization of simple objects, and making working drawings of machine assemblies. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

40a, 40b, 40c, 40d. **DESCRIPTIVE GEOMETRY.** *Mr. Burnham.* Prerequisite: Engineering Drawing 7a and 7b, or previous drawing experience. Theory and principles of projection including points, lines, planes, shades and shadows, plane sections and development of surfaces, and intersections of surfaces. Practical problems from the student's chosen field will be given towards the end of 40d. 1 or 2 units per semester. For a well rounded course 40a should be taken immediately after Engineering Drawing 7. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

101a, 101b, 101c, 101d. **ARCHITECTURE.** *Mr. Burnham.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, and sufficient knowledge of physics that the student is at least conversant with the subjects of mechanics, heat, sound, electricity, and light. Basic work in architectural design including consideration of construction details, materials, wiring, lighting, plumbing, and heating. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged. (Omitted in 1952-53.)

102a, 102b, 102c, 102d. **MECHANISMS.** *Mr. Burnham.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, Physics 51a. Practice in the graphical solution of structures, gears, cams, and machine mechanisms, using the principles of statics and kinematics. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

103a, 103b, 103c, 103d. **TOPOGRAPHICAL DRAFTING.** *Mr. Burnham.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b. Practice in the making of topographical maps and the construction of models. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

104a, 104b, 104c, 104d. **PRODUCTION ILLUSTRATION.** *Mr. Burnham.* Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, 40c, 40d. Practice in the making of isometric, oblique, and diametric sketches and drawings including the use of special instruments. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged. (Omitted in 1952-53.)

105a, 105b, 105c, 105d. **DESIGN OF MACHINE ELEMENTS.** *Mr. Burnham.* Prerequisite: Engineering Drawing 102a, 102b, 102c, 102d. The design of machines from the student's chosen field. 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged. (Omitted in 1952-53.)

AVAILABLE AT CLAREMONT SUMMER SESSION

10. **SURVEYING.** *Mr. Jaeger.* 3 units. Offered in Claremont Summer Session.

Military Science

The College maintains an Infantry Unit, Senior Division, of the Reserve Officers' Training Corps, established under the National Defense Act for the purpose of training students to become officers of the Army of the United States. During the past year the emphasis of this training has been changed so that the ROTC now constitutes the principal source of procurement of junior officers for the Regular Army with the general purpose of providing officers for the Officers' Reserve Corps and National Guard. Those students who successfully complete the four year course will be tendered commission as second lieutenants of Infantry in the Organized Reserve Corps, while those of outstanding proficiency will be offered a similar opportunity in the Regular Army.

The courses include both classroom and out-of-doors instruction. Instruction in military theory has been greatly expanded since World War II and covers the basic technical knowledge required of a lieutenant in the United States Army. One drill period a week provides an opportunity for the practical application of command and assists in the improvement of the posture and physical coordination of the student. Special emphasis is placed on the development of the qualities of leadership throughout the course. The points acquired by the student and his experience in the art of command may be applied in any walk of life.

The instructors in the department are officers of the United States Army detailed for duty at the college by the Department of the Army. The most modern weapons, equipment and types of instructional material are furnished to give the students practical experience in handling such equipment.

The four year course is divided into the basic course which consists of MS I and MS II (each requiring two terms) and the advanced course which consists of MS III, MS IV (each requiring two terms) and one summer training camp of six weeks duration. Enrollment in the basic or advanced course is voluntary. However, when a student has elected either course the completion of the second year of that course becomes a prerequisite for graduation.

The basic course is open to all physically fit male students who are American citizens. Enrollment does not interfere with the participation in sports by the students nor in other activities of the college. Uniforms and books for these courses are issued to the students without charge.

Military service during World War II furnishes a basis for credit for basic course instruction according to the individual's length of service, type of training, and honorable discharge from the military or naval service of the United States. Credit is also allowed for prior Senior or Junior ROTC training. Application for advanced standing must be made during registration and discharges from the military or naval service or certificates showing successful completion of ROTC courses at other schools should be presented at that time.

Enrollment in the advanced course (MS III and IV) is limited to select members who have completed the basic course, or have received equivalent

credit because of military or naval service, and who enter into an agreement to attend one summer training camp. In consideration of this agreement, students receive cash allowances from the government equivalent to a scholarship of about \$310.00 a year. All necessary expenses in connection with the training camp, including transportation to and from camp, food, housing, pay, uniform and medical attention are provided by the government.

Regularly enrolled ROTC students may be deferred from induction and service under the Universal Military Training and Service Act of 1951. Students so deferred must agree to complete the basic course, if enrolled therein; to enroll in and complete the advanced course at the proper time, if accepted therefor; and upon completion or termination of the course of instruction therein, to accept a commission, if tendered; to serve on active duty for a period of not less than two years after receipt of such commission, subject to order by the Secretary of the Army; and to remain a member of a Regular or Reserve component of the Army until the eighth anniversary of the receipt of his commission unless sooner terminated.

Graduating students who have maintained a high standing in military subjects may be designated by the Professor of Military Science and Tactics as "Distinguished Military Students" because of their demonstrated leadership, aptitude and academic proficiency. The Senior ROTC will provide the principal source of procurement of junior officers for the Regular Army through selection of distinguished military graduates of the Senior ROTC Units for direct Regular Army appointment without further mental examination. Through voluntary extended active duty-tours other graduates may be selected for appointment as officers of the regular army.

1a-1b. MILITARY SCIENCE COURSE I. *Staff.* Military Organization; Military Policy of U. S., National Defense Act and ROTC; Evolution of Warfare; Maps and Aerial Photographs; Weapons and Marksmanship; First Aid and Hygiene; Military Problems of the U. S.; and Leadership, Drill, and Exercise of Command, 2½ units. Class, *TTh*, 8, 9, or 10; *M*, 1:15-2:05.

52a-52b. MILITARY SCIENCE COURSE II. *Staff.* Weapons and Marksmanship; Organization; Technique of Fire; Combat Formations; Scouting and Patrolling; Squad Tactics; and Leadership, Drill, and Exercise of Command. 2½ units. Class, *TTh*, 8, 9 or 10; *M*, 1:15-2:05.

103a-103b. MILITARY SCIENCE COURSE III. *Staff.* Weapons Organization; Gunnery; Field Fortifications; Communications; Combat Intelligence; Estimate of the Situation and Combat Orders; Platoon and Company Tactics; Leadership, Drill, and Exercise of Command. 4 units. Class, *MWF*, 8 or 9; *M*, 1:15-2:05; and *F*, 11 or 1:15.

140c. MILITARY SCIENCE ROTC SUMMER CAMP. *Staff.* Military sanitation; chemical warfare; safeguarding military information; drills and parades; weapons and marksmanship; information and education; interior guard duty; mess management; physical training and athletic; marches and bivouacs; tactics and technique. 3 units. Six weeks in June and July at camp designated by army commander.

154a-154b. **MILITARY SCIENCE COURSE IV.** *Staff.* Military Administration; Military Teaching Methods; Motors and Transportation; Troop Movements; Command and Staff; Psychological Warfare; Military Law and Boards; Organization; Communications; Supply and Evacuation; Battalion Tactics, Military Team; Geographical Foundations of National Power; Leadership, Drill, Exercise of Command. 4 units. Class, *MWF*, 8 or 9; *M*, 1:15-2:05 and *F* or 1:15.

Advanced course students in Military Science are required to attend a summer camp between their 1st year advanced and 2nd year advanced course which 3 units of credit are allowed toward graduation.

Music

Recognizing a dual function in its educational approach, the Music Department endeavors to meet the needs of both the general and the pre-professional student. It offers to the first type a wide selection of both participating and non-participating courses, in order to aid him in giving music a place of importance in his future cultural life and experience. To the second type who enter the music profession as teachers and performers, the music concentration program affords a thorough and broad pre-professional training, leading to graduate study.

Requirements for concentration: The following courses are required of students concentrating in music: Music 1, 2, 55, 56, 104, 107, 159, and 160. Students transferring from other institutions as upper-classmen should complete the equivalent of the Lower Division courses (those under 100) before coming to Pomona. Freshmen and transfer students will take a placement test in theory*; information concerning this test may be obtained from the Music Department.

Students must elect one of four areas of concentration before the junior year. Each of these areas will include the courses required of all students (listed above) as well as certain other courses as follows:

Composition: Music 113 and 158.

History: A choice of two of the following—Music 103, 160 and 163.

Applied Music: Music 11, 61, 111, and 161.

General Music Concentration: A choice of any of the offerings of the Department that will include Applied Music, Group Activities, and Upper Division theory of history courses; this work must include 8 hours of Upper Division units.

Courses open to non-concentrators. The Department of Music offers a variety of courses and musical activities to non-concentrators, including music appreciation.

*Transfer credit for previous college theory study will be determined by the results of the placement test.

ation (53), theory (4), history (103, 104), and piano literature (112). Vocal and instrumental Applied Music may be taken by the non-concentrator for credit if accompanied or preceded by Music 1 and 2, or Music 4. Group activities open to all students include Choir (57), Orchestra (58), Band (59), and Chamber Music (60).

THEORY, APPRECIATION AND HISTORY

1a-1b. **ELEMENTARY HARMONY.** *Mr. Loucks, Mrs. Briggs.* Thorough grounding in the fundamentals of music through the mediums of hearing, singing, writing, and the keyboard. Study of major and minor modes; all diatonic triads, and seventh chords and all non-chordal tones. Harmonic analysis of melodies. Four-part writing based on the techniques of the 17th and 18th centuries. Prerequisite, knowledge of time signatures, simple key signatures, and ability to read a simple hymn at the piano. Credit for this course is given only when accompanied by 2a-2b. 3 units. *MWF, 9 or 1:15.*

2a-2b. **EAR TRAINING AND SIGHT SINGING.** *Mr. Loucks, Mrs. Briggs.* Training in melodic, rhythmic and harmonic relationships through singing and dictation. Keyboard practice in simple modulations and cadential combinations. To be taken with 1a-1b. 2 hours, 1 unit. *MW, 10 or 1:15; TTh, 10 or 1:15.*

4a-4b. **MATERIALS OF MUSIC.** *Mr. Kohn.* This course is designed to give a thorough elementary understanding of the materials of music—harmony, melody and rhythm—and to develop facility in reading and notating music. Discussion of these materials from a historical as well as a theoretical viewpoint will be part of the course, which aims at the development of the student's comprehension of all the factors that enter into the musical experience. The work will comprise written exercises, sight-singing, supplementary listening, and selected readings. This course is intended for the general student; credit for it may not be counted towards concentration in music. 3 units. *MWF, 10.*

53a-53b. **INTRODUCTION TO MUSIC.** *Mr. Dayton.* Survey of the principal periods in music history from the Renaissance to the present; important composers, trends, forms, and musical aesthetics of each era. Detailed study and analysis of symphony, concerto, opera, chamber music, song and piano literature. A non-technical listening course. No previous musical experience required. 2 units. *MW, 2:15-3:30.*

55a-55b. **ADVANCED HARMONY.** *Mr. Loucks, Mr. Kohn.* A study of part-writing technique as found in the Bach Chorales. Chromatic harmony and modulation. Practice in instrumental styles. Prerequisite, Music 1 and 2. Credit for this course is given only when accompanied by 56a-56b. 3 units. *MWF, 10 or 11.*

56a-56b. **ADVANCED EAR TRAINING AND KEYBOARD HARMONY.** *Mr. Loucks, Mr. Kohn.* Training in the hearing of progressions involving chromatic chords, largely through harmonic dictation. Keyboard work including modulation and sight harmonization of melodies. 2 hours, 1 unit. *MW, 2:15; TTh, 10 or arranged.*

103a, 103b. **MUSIC IN AMERICAN HISTORY.** *Mr. Fiske.* This course is designed to provide the general student with an understanding of the part music has taken in the social and educational growth of the United States, from the colonial period to the present day. Attention will be given to folk, popular and art music and their importance in various phases of our national cultural development. Not limited to music students. 3 units. *TThS*, 9. (Offered in alternate years; to be omitted in 1953-54.)

104a-104b. **HISTORY OF MUSIC.** *Mr. Parrish.* A survey of the various periods of music history from the early Christian era to the present day, with emphasis on the factors of musical style manifested in the literature of the important composers. This course may be taken by sophomore music concentrator. 3 units. *TThS*, 9.

107a-107b. **COUNTERPOINT.** *Mr. Loucks.* An analytical study of the Palestrina technique. Two and three-voice writing in free style. Original work in the forms of the classical suite, chorale prelude and variations. Prerequisite, Music 55. 3 units. *TThS*, 10.

112. **PIANO LITERATURE AND REPERTOIRE.** *Mr. Dayton.* A comprehensive survey of the solo, concerto and two-piano literature, including a detailed study of the pianistic styles of Bach, Mozart, Beethoven, Schumann, Chopin, Brahms, Debussy and contemporary composers. Special emphasis on program building and the technique of public performance. Permission of instructor required. First semester. 2 units. Arranged.

113a-113b. **ORCHESTRATION AND INSTRUMENTATION.** *Mr. Blanchard.* A study of the instruments of the modern orchestra and band, their technical possibilities and limitations. Practical laboratory work in scoring for instrumental groups. Choral arranging for various voice combinations with and without accompaniment. Opportunity will be provided for public performance of outstanding scores. Fundamentals of conducting will be stressed throughout the course. Prerequisite, Music 55. 3 units. *MWF*, 9, or arranged.

158a-158b. **FREE COMPOSITION.** *Mr. Parrish.* Advanced original work in polyphonic and homophonic forms, planned to develop the student's sense of musical structure and his individual manner of musical expression. Prerequisite, Music 107. 3 units. Arranged.

159a-159b. **FORM AND ANALYSIS.** *Mr. Blanchard.* Designed to lead to a clear understanding of the principles upon which musical form is based, and to the application of these principles in the works of the great masters of form. Prerequisite, Music 55. 2 units. *TTh*, 8.

160a, 160b. **MUSIC OF THE MIDDLE AGES AND THE RENAISSANCE.** *Mr. Parrish.* The first semester deals with the music of the early Christian Church, the Troubadours, the early polyphonic period, and the final flowering of medieval musical art in the "ars nova" of the fourteenth century. The second semester covers the period of the Burgundian School of the fifteenth century through the culmination of the great polyphonic period of Palestrina and Lassus in the

late sixteenth century. Prerequisite, Music 104. 3 units. Arranged. (Offered in alternate years. To be omitted in 1953-54.)

163a, 163b. MUSIC OF THE BAROQUE AND CLASSICAL PERIODS. *Mr. Parrish*. The first semester is concerned with the vocal and instrumental music, both sacred and secular, of the seventeenth century and of the age of Bach and Handel. The second semester deals with the rise of the classical era, and includes a detailed study of certain of the characteristic works of Haydn, Mozart, and Beethoven in various instrumental and vocal mediums. Prerequisite, Music 104. 3 units. Arranged. (Offered in alternate years. To be omitted in 1952-53.)

195a-195b. MUSIC SEMINAR. *Mr. Parrish and the departmental staff*. Studies in the development of musical style, designed to aid the student in integrating his previous historical, theoretical and interpretative studies into broad concepts of musical evolution. While the areas covered are grouped for convenience into musical literature, theory and performance practices, emphasis is placed on the inter-relationship of all these phases. Required of all senior majors in music. *F*, 2:15.

APPLIED MUSIC

Credit for individual and class work in Applied Music is open to all students in the college, subject to the following provisions: (1) a total of not more than 16 units of instruction in Applied Music may be counted toward the Bachelor of Arts degree. Credit of 2 units per semester is given for two private lessons weekly, 1 unit per semester for one private lesson weekly. (2) Music 1 and 2 must accompany or precede all credit study. Music 55 and 56 must accompany or precede more than one year of credit study for those taking two lessons weekly.

Those not concentrating in music may obtain credit for one lesson per week upon completion of Music 1 and 2, or Music 4. Students preparing to concentrate in Applied Music are required to take two lessons per week in their major subject and to appear frequently in recitals.

II. APPLIED MUSIC (Freshman level)

5I. APPLIED MUSIC (Sophomore level)

III. APPLIED MUSIC (Junior level)

16I. APPLIED MUSIC (Senior level)

No credit is given for work in Applied Music taken elsewhere while the student is enrolled at Pomona College. Transfer of credit from a recognized institution may be granted upon examination and departmental recommendation. All private lessons are one-half hour in length.

VOICE, *Mrs. Briggs*

ORGAN, *Mr. Blanchard*

PIANO, *Mr. Dayton, and Mr. Kohn*

VIOLIN AND VIOLA, *Mr. Fiske, and Miss Smith*

VIOLONCELLO, *Miss Jean*

WOODWINDS, *Miss Anthony, Mr. Gassman.*

BRASS, *Mr. Tyler*

Lessons on other instruments may be arranged through the office of the Music Department.

Examinations in Applied Music. Examinations, to be given before the entire Music Faculty, are required of all students in Applied Music, as follows:

Qualifying Examination for Lower Division Credit—to be given, normally, at the beginning of the Freshman year to determine eligibility for credit. No credit is given for elementary study.

Qualifying Examination for Upper Division Credit—to be given, normally, at the end of the Sophomore year to obtain faculty recommendation for concentration in Applied Music. Should a student fail to qualify for such recommendation, he may repeat the examination at the beginning of his Junior year. Transfer students will be examined upon entrance.

Students who fail to pass the Qualifying Examination for Upper Division Credit but wish additional credit may, by special examination, be allowed a maximum of 4 more units at the Lower Division level.

Senior Comprehensive Examination in Applied Music—all students concentrating in Applied Music will present a satisfactory senior public recital or take the comprehensive Applied Music Examination to be given at the end of the senior year.

Printed information concerning the Qualifying Examinations may be obtained from the Music Department.

GROUP ACTIVITIES

As an important force in the educational life of Pomona College, the Music Department offers opportunity for participation in various instrumental and choral activities on an extra-curricular as well as a credit basis. Not more than two of the following credit-courses may be taken simultaneously. Permission of the instructor is required.

57a-57b. COLLEGE CHOIR. *Mr. Russell.* The study of classic and contemporary choral music through rehearsals leading to public performance. All students are eligible for the Choir, but continued membership is contingent upon satisfactory performance in a singing test held in October on music practiced during the opening weeks of the semester. New members admitted in first semester only. Fee to cover cost of music, \$2.00 1 unit. May be repeated for credit. *MWThF, 12:30-1:10; T, 11:30-12:20.* (Women do not meet on *Th*; men do not meet on *M*.)

58a, 58b. ORCHESTRA. *Mr. Fiske.* A study of major works of orchestral repertoire and application of the principles of orchestral routine through public performance. Two periods of attendance weekly. Additional sectional rehearsals at option of director. The course may be repeated for credit. 1 unit. *TTh, 4:15.*

9a, 59b. **BAND.** *Mr. Russell.* Concert and field work, brass ensemble work, joint performance with choral groups, opportunity for performance of student compositions and arrangements. Two rehearsals weekly. 1 unit. May be repeated for credit. *MW, 4:15.*

6a, 60b. **CHAMBER MUSIC.** *Mr. Fiske.* A study of important chamber music literature from the 17th century to the present day through performance and analysis. Course also includes historical study of the works performed. Open only to advanced instrumentalists able to participate in performance. Permission of instructor required. The course may be repeated for credit. 2 units. Arranged.

MEN'S AND WOMEN'S GLEE CLUBS. *Mr. Russell.* The Glee Clubs offer opportunity for study and performance of sacred and secular choral works in a small extra-curricular ensemble. Each club enrolls between thirty and forty members at the beginning of the college year. All students are eligible, although final admission is by tryout only. Two rehearsals weekly. No credit.

FEES FOR INSTRUCTION AND PRACTICE

For those paying regular tuition:

	PER SEMESTER
One-half hour private lesson per week	\$45.00
Each additional half-hour	40.00

For those carrying less than ten hours of college work, exclusive of work in applied music:

One-half hour private lesson per week	60.00
Each additional half-hour	40.00
Class instruction	25.00

PRACTICE FEES

	PER SEMESTER
Piano, one hour daily	6.00
Bridges Hall Organ (four manuals), one hour weekly	5.00
Two-manual Organ, one hour weekly	2.50
Bridges Auditorium Organ, Claremont College, (advanced students only) one hour weekly	15.00

All students taking courses in Theory (Harmony, Counterpoint, Composition and Orchestration) will be charged the above fee of \$6.00 per semester for use of a piano. Students taking two of these courses will not be charged this fee for the second course, and the fee will not be charged to students who pay a practice fee in connection with their lessons in Applied Music.

AVAILABLE AT SCRIPPS COLLEGE

169. **NINETEENTH CENTURY MUSIC.** *Mr. Pattison.* Year course. *TTh, 1:15-4:45.*

170. **CONTEMPORARY MUSIC.** *Mr. Pattison.* Year course. *TTh, 3:15-4:45.*

* * *

Graduate work in Theoretical and Applied Music is offered under the auspices of the Claremont Graduate School.

Oriental Affairs

A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year's work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Philosophy 126.

51a, 51b. THE CULTURAL LEGACIES OF EAST ASIA. *Mr. Ch'en*. A survey of the humanistic achievements of China and India, and their diffusion in other lands in East Asia. A general introduction to East Asian literature, philosophy, religion, and art. 3 units. *MWF, 10*.

52a, 52b. FIRST YEAR CHINESE. *Mrs. Soong*. A course for beginners in the Chinese language, with equal emphasis on the analysis of written characters and on actual use of the spoken language. 3 units. *MWF, 8*.

103a, 103b. HISTORY OF CHINA. *Mr. Ch'en*. General survey of Chinese History, with emphasis on such topics as the rise of philosophical schools, important movements in literature and art, and the evolution of social and political institutions. An effort will be made to interpret the complexities of the problem of present day China in the light of her ancient cultural heritage. 3 units. *MWF, 9*.

104. CHINESE LITERATURE IN TRANSLATION. *Mrs. Soong*. A study of outstanding Chinese literary works in English translation with the aim of a deeper appreciation of Oriental life and thought. 3 units. Second semester. *MWF, 9*. (Omitted in 1952-53.)

105. THE CONTEMPORARY FAR EAST. *Mr. Ch'en*. The impact of Occidental cultures and peoples upon Eastern Asia, including India and Malaysia; the physical, intellectual, and moral resources of Oriental nations; the post-war problems of these countries today. 3 units. First semester. *T, 7-9:30 p.m.* (Omitted in 1952-53.)

111. JAPANESE HISTORY AND CULTURE. -----The evolution of Japanese social, economic, and political institutions since prehistoric times. Geographical foundations and the development of Japanese philosophy, literature, and the fine arts will receive some stress. About one-third of the course will deal with Japan since 1603. 3 units. Second semester. *TThS, 10*.

123. EASTERN ASIA IN THE NINETEENTH CENTURY. -----A consideration of the traditional patterns of life and institutions in China under the Manchus, in Tokugawa Japan, and to a lesser extent under the old regimes in Korea, Siberia, and Southeastern Asia prefaces a study of the impact of Western imperialism and civilization upon those countries. Domestic developments receive slightly more emphasis than foreign relations. 3 units. First semester. *MWF, 11*. (Omitted in 1952-53.)

24. EASTERN ASIA IN THE TWENTIETH CENTURY. Cultural and political revolutions which began or have been accentuated since the turn of the last century and which still are in progress will be studied. Special attention is devoted to the implications of such forces as nationalism and imperialism, democracy and totalitarianism, capitalism and communism, science and industrialism, operating as the Far East evolves new modes of thought, organization and behavior. It is suggested but not required that this course be preceded by Oriental Affairs 123. 3 units. Second semester. (Omitted in 1952-53.)

25. HISTORY OF CULTURAL RELATIONS BETWEEN CHINA AND THE OCCIDENT. *Mr. Ch'en*. A rapid survey of the religious, intellectual, literary and artistic relations and interchanges between China and the Western World from pre-Roman times to the middle of the nineteenth century. 3 units. Second semester. (Omitted in 1952-53.)

26. 151a, 151b. SECOND YEAR CHINESE. *Mrs. Soong*. An intermediate course open to those who have had 52a, 52b. 3 units. *MWF, 2:15*.

27. 150. HISTORY OF FAR EASTERN DIPLOMACY. Some attention to European relations with Malaysia and Indonesia, and to the period of 1500-1800; with major emphasis on diplomatic relations of the Western Powers and Russia with China, Japan, Korea, and the Philippines since 1800. 3 units. First semester. *TThS, 10*.

28. 151a, 181b. THIRD YEAR CHINESE. *Mrs. Soong*. A continuation of 151a, 151b with exercises in reading classical (Wenli) Chinese prose and poetry. 3 units. Arranged.

29. 155. READINGS IN ORIENTAL AFFAIRS. *Staff*. 2 or 3 units. Each semester. May be repeated for credit. Arranged.

30. 126. ORIENTAL PHILOSOPHY. For description see Philosophy 126.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

31. 222a, 222b. STUDIES IN THE HISTORY OF CHINESE THOUGHT. Arranged.

32. 251a, 251b. ADVANCED CHINESE.

33. 121. PROBLEMS IN CHINESE HISTORY *Mr. Ch'en*. Each semester. Arranged.

34. 268a, 268b. STUDIES IN THE DIPLOMATIC HISTORY OF EASTERN ASIA. Arranged.

Philosophy

Courses 55 and 57 are general introductions to philosophy. They are recommended for students who wish a general acquaintance with the subject. Either satisfies the distribution requirement.

Concentration: Students planning to concentrate in philosophy must take Philosophy 55 and twenty-four hours of upper division work. Eighteen

of these must be in the field of philosophy, but six hours of work may be chosen from other departments if the selection is approved by the student's adviser. An introductory course in psychology is recommended.

Students transferring to Pomona at the beginning of the Junior year are eligible to concentrate in philosophy provided the lower division prerequisites are met before entrance or can be met during the Junior year. Information concerning the Honors program in philosophy may be obtained from the Department. Those intending to do graduate work in philosophy should have a reading knowledge of French and German.

51. INTRODUCTION TO LOGIC. *Mr. Iredell*. A study of the elements of deductive and inductive reasoning with special emphasis upon the nature and use of scientific hypotheses, probability, and deductive and inductive fallacies. 3 units. First semester. *MWF*, 8.

55a, 55b. HISTORY OF EUROPEAN PHILOSOPHY. *Mr. Jones* and *Mr. Sontag*. A study of the main currents of European philosophy from the earliest Greek thinkers through modern philosophic thought. The course is designed to be a general and cultural introduction to philosophy through a study of its history. 3 units. Two sections. *MWF*, 10, 2:15.

57a, 57b. PROBLEMS OF PHILOSOPHY. *Mr. Iredell* and *Mr. Sontag*. An introductory consideration of the meaning and method of philosophy, an examination of problems which emerge in the physical and biological sciences, and a review of some of the main philosophic estimates of life. 3 units. Two sections. *TThS*, 8, 10.

120. PHILOSOPHY OF ART. *Mr. Jones*. Designed primarily for students working in some form of artistic expression who are interested in studying the significance and limitations of the esthetic experience. 3 units. First semester. *MWF*, 2:15. (Omitted in 1952-53.)

126. ORIENTAL PHILOSOPHY. *Mr. Iredell*. This course is designed to provide the student with a general background of oriental thought as a basis for further study of oriental life and culture. An attempt will be made to gain an appreciation of the thought life of the Orient through a study of some of the more important thinkers and schools of oriental philosophy and through a comparison of oriental and western philosophical views and cultural ideals. 3 units. Second semester. *MWF*, 8.

131. TYPES OF ETHICAL THEORY. *Mr. Sontag*. A consideration of some representative solutions for the main problems of moral theory. The course is designed for students interested in thinking critically about ordinary beliefs concerning conduct. 3 units. Second semester. *TThS*, 9.

132. PHILOSOPHY OF THE STATE. *Mr. Sayre*. A critical investigation of such central political concepts as: the state, society, the individual, freedom, law rights, duty, property, etc. The course will emphasize applications to currently competing systems; it is therefore designed for the student who is keenly aware of the clashes in ideals around him and who is willing to push sys

ematically to the roots of these clashes. 3 units. Second semester. *TThS*, 9. (Omitted in 1952-53.)

41. READINGS IN THE HISTORY OF PHILOSOPHY. *Staff*. A course consisting of readings, papers, and oral reports. The material is designed to enrich a student's knowledge of philosophical literature and to aid him to integrate his work in the field and to relate it to the material of other fields. The content of the course may vary according to the needs of those enrolled and may be repeated for credit for a total of 6 hours. (The total amount of credit which any student may earn in Philosophy 141 and 142 is limited to 9 hours.) The course is limited to Juniors and Seniors and normally is open only to those concentrating in Philosophy. Permission of the instructor is required. 1-3 units. Each semester. Arranged.

42. READINGS IN THE PROBLEMS OF PHILOSOPHY. *Staff*. A course consisting of readings, papers, and oral reports. The material is designed to enrich a student's knowledge of the systematic aspects of philosophy and to aid him to integrate his work in the field and to relate it to the material of other fields. The content of the course may vary according to the needs of those enrolled and may be repeated for credit for a total of 6 hours. (The total amount of credit which any student may earn in Philosophy 141 and 142 is limited to 9 hours.) The course is limited to Juniors and Seniors and normally is open only to those concentrating in Philosophy. Permission of the instructor is required. 1-3 units. Each semester. Arranged.

51. SOME REPRESENTATIVE PHILOSOPHIES OF LIFE. *Mr. Jones*. A study of the views of four philosophical poets — Lucretius, Dante, Goethe, and T. S. Eliot. 3 units. First semester. *MWF*, 11.

52. THE NINETEENTH CENTURY. *Mr. Jones*. A study of the main currents of 19th century thought and of their reflection in the literature, the history, and the social movements of the period. 3 units. Second semester. *MWF*, 11.

53. PHILOSOPHY OF SCIENCE. *Mr. Sayre*. A consideration of the basic concepts and methods underlying contemporary scientific thought. The concepts of space, time, matter, energy, empirical method, etc. will be examined critically with special emphasis on current post-Newtonian theory. 3 units. Second semester. *MWF*, 8. (Omitted in 1952-53.)

54. CONTEMPORARY PHILOSOPHY. *Mr. Iredell*. A study of contemporary philosophic thought with special reference to the dominant ideas of the civilization of today. Prerequisite, Philosophy 55 or 57, or such previous work as will provide an equivalent grasp of the basic problems of philosophy. 3 units. (Omitted in 1952-53.)

HISTORY OF POLITICAL THOUGHT. For description see Government 182.

PHILOSOPHY OF RELIGION. For description see Religion 101.

INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. For description see Education 151.

AVAILABLE AT SCRIPPS COLLEGE

IV-54. LITERARY INTERPRETATIONS OF PHILOSOPHICAL QUESTIONS. *Mr. Barrett.* First semester. *MWF, 11.*

IV-159. HISTORY OF IDEAS. *Mr. Barrett.* First semester. *MWF, 10.*

IV-160. CONTEMPORARY PHILOSOPHY. *Mr. Barrett.* Second semester. *MWF, 10.*

Physical Education

The program of Physical Education in Pomona College is based upon the belief that a liberal education should include knowledge of the structure and functions of the human mechanism; understanding of the hygienic practices which promote physical, mental and social health; reasonable skill in developmental and recreational activities of a physical type which will promote the individual's well-being during college years, and in later life; and a disposition to make such knowledge and skill essential elements in effective living.

A student is required to take one unit of Physical Education Activities per semester during his Freshman and Sophomore years, and one-half unit per semester during his Junior and Senior years.

CONCENTRATION IN PHYSICAL EDUCATION

This program, followed by a year of work in the Claremont Graduate School, will qualify the student for the general credential with a major in physical education. It will also qualify the student for advanced work in physical therapy, occupational therapy, and recreation. Students interested in the three latter fields should confer with some member of the physical education department during the freshman year since slight changes in the following program may be needed to qualify for entrance to some of these fields.

In order to complete all required courses in the four year college period students should take courses in the year in which they are suggested below.
FRESHMAN YEAR: Biology 1, English 1, Physical Education 5. Suggested: Speech and Drama 52.

SOPHOMORE YEAR: Zoology 37, Education 53, Psychology 51, Sociology 51 and 52.

JUNIOR YEAR: Physical Education 123, 124, 129, 119 (women), 224. Psychology 107. Suggested: Music 53.

SENIOR YEAR: Physical Education 126, 152, 154, 191 (men), 130 (women), Psychology 108.

In addition to the above, 6 units of physical education activities are required. It is suggested that these be so selected as to give the individual opportunity for both technical skills and leadership training in a wide range of activities.

A reading knowledge of French and German is highly desirable for students planning graduate research in physical education.

A non-credit Camp Counselor's training course for women is held throughout the year, including a short in-camp period immediately following Com-

necement. The course aims to provide its members with experience and skills useful in summer camps, playgrounds, and other activities of community recreation. (Given when there is sufficient demand.)

THEORY

5. PRINCIPLES OF HEALTHFUL LIVING. A consideration of factors that influence the physical and mental health of people as individuals and as members of society. Includes methods for the promotion of the health of the individual with emphasis on special health problems of college students and young people generally. Women, 3 units, first semester, *Miss Shurtz*, MWF, 10. Men, 2 units, first semester, *Mr. Malan*, MW, 11.

19a-119b. (Women) TECHNIQUE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Miss Shurtz*. Analysis of techniques and methods of presenting them for teaching at the elementary and secondary level. Laboratory work includes officiating in all team sports and playdays as well as assisting in the teaching of the team sports. Prerequisite—knowledge of the following physical education activities: archery, badminton, basketball, hockey, softball, speedball, swimming, tennis, and volleyball. 3 units. Given in alternate years. MWF, 9. (Omitted in 1952-53.)

23. NATURE AND FUNCTION OF PLAY. *Miss Cawthorne*. The psychology of play and the function of play in growth, development and social adjustment. Methods of leadership and organization of play activities to bring out moral habits and use of the democratic process in play situations. Special attention given to the elementary school physical education program. First semester. 2 units. TTh, 8.

24. COMMUNITY RECREATION. *Miss Cawthorne*. A study of the organization of school and municipal playgrounds and the contributions of the federal government to recreation programs in the United States. History of the Recreation Movement in the United States. Types of organization and leadership needed for conducting tournaments, active and quiet play programs, social recreation and camp activities. Study of the physical lay-out of different types of recreation centers. Survey of administrative set-ups for municipally financed recreation programs. Limited to Juniors and Seniors. Second semester. 2 units. TTh, 8.

26. COMMUNITY HYGIENE. *Miss Shurtz*. A survey of the field of public health and sanitation. Includes a brief historical account, a study of general factors influencing public health and a summary of public health agencies, their organization and activities. Extensive study of public and private water supplies, disposal of wastes, control of food and dairy products, proprietary medicine and quackery, and mental, industrial and school hygiene. Attention given to methods of setting up a school health program. Second semester. 2 units. MWF, 10.

29. KINESIOLOGY. *Miss Cawthorne*. An analysis of joint and muscular mechanisms, and their relation to problems of bodily development and efficiency. Prerequisite, Zoology 37. 3 units. Second semester. MWF, 8.

130a, 130b. THE HISTORY AND TEACHING OF DANCE. *Miss Burt*. Analysis of the problems and techniques of presentation of rhythms for those preparing for recreational leadership or for teaching at the elementary or high school level. The first semester includes the historical background of both folk and contemporary dance and the theory and practice of teaching folk dancing; the second semester includes a study of a creative process in dance, dance composition, and the techniques of teaching contemporary dance. Permission of the instructor is required. One hour lecture, two hours laboratory each semester. 2 units. Lecture *M*, 10; laboratory *WF*, 10.

152. PHYSICAL DEVIATIONS. *Miss Cawthorne*. Study of body mechanics and the causes, prevention, and correction of physical defects. Laboratory work includes methods of examination, prescription of exercises. Prerequisite, 129. 3 units. First semester. *MW*, 8; and laboratory *F*, 8-10.

154. PRINCIPLES OF PHYSICAL EDUCATION. *Mr. Malan*. Limited to Juniors and Seniors preparing to teach Physical Education. 3 units. Second semester. *MWF*, 11. (Omitted in 1952-53.)

191a, 191b. (Men) THEORY AND PRACTICE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Staff*. Limited to senior majors in Physical Education and Education. Others must have permission of department. 4 units. *WF*, 1:15 and arranged. Practice teaching, three hours, arranged.

224. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION AND RECREATION. (*Available at the Claremont Graduate School.*) *Mr. Bell*. 3 units. First semester. *TTh*, 9-11.

MEN

Students engage in programs of physical education activities selected according to individual needs as determined by medical and physical examinations and tests. Complete freedom in the choice of activities is permitted only to men who maintain acceptable standards in health, physical development, and physical efficiency. Among the minimum requirements of the Department are good posture, ability to swim, elementary skill in self defense, proficiency in fundamental activities, reasonable skill in at least one individual sport and in one team game.

The following physical education activities are carried on under supervision of the Department: Archery, badminton, baseball, basketball, boxing, corrective exercises, cross country running, dancing, fencing, football, golf, gymnastics, life saving, softball, swimming and diving, tennis, touch football, track and field athletics, tumbling, volleyball, water polo, weight lifting, and wrestling. Fees as indicated are required each semester of those who select archery (\$1.50), fencing (\$7.00), golf (\$10.00).

The Department conducts a competitive intramural program including sports in season.

The college program of intercollegiate athletics is an integral part of the program of Physical Education. No student is permitted to participate in

the more strenuous forms of competition without a certificate from the College physician indicating that the individual is physically fit for such participation. The student obtains credit in the required courses listed below by participation in activities selected in accordance with the principles set forth in the preceding paragraphs.

1-1b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit. Arranged.

2-2b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required of Freshmen not taking Military Science. $\frac{1}{2}$ unit. Arranged.

3-3b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

4-4b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required of Sophomores not taking Military Science. $\frac{1}{2}$ unit. Arranged.

5-5b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Junior year. $\frac{1}{2}$ unit. Arranged.

6-6b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Senior year. $\frac{1}{2}$ unit. Arranged.

WOMEN

Medical and physical examination is given all entering students with subsequent posture tests. Physical activities are allowed or prescribed as the result of these examinations. Participation in a fundamental activity is required one semester of the Freshman year. Students may have freedom of election in their activities in so far as medical and physical examinations warrant, but must include by the end of the Sophomore year one individual sport and one semester of either folk or contemporary dance. The passing of a swimming achievement test is required for graduation. It should be completed by the end of the Sophomore year.

Activity fees are charged for badminton, riflery, and archery (\$1.50 semester), golf (\$10 semester), fencing (\$7 semester).

ACTIVITY

Six units of Physical Education Activities are required for graduation. One unit is credited for 11a-b, Fundamentals, which includes courses organized to teach the basic fundamentals of physical activity. The remaining 5 units may be earned by participation in other activities.

FUNDAMENTALS: contemporary dance, individual gymnastics, group gymnastics.

TEAM SPORTS: basketball, softball, speedball, hockey, volleyball.

INDIVIDUAL SPORTS: archery, badminton, tennis, golf, riflery, swimming, fencing.

DANCING: contemporary, folk and square.

11a-11b. FUNDAMENTALS. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit Arranged.

12a-12b. SPORTS OR DANCING. *The Staff*. Required, Freshman year. $\frac{1}{2}$ unit Arranged.

63a-63b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

64a-64b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

115a-115b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Junior year. $\frac{1}{2}$ unit. Arranged.

117a-117b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Senior year. $\frac{1}{2}$ unit. Arranged.

Physics

The minimum concentration program in physics includes 25 units of upper division physics, Mathematics 1, 65, 151, and Chemistry 1. Additional work in physics, mathematics, chemistry, German, engineering drawing, and descriptive geometry is recommended. A minimum concentration program in physics will normally be elected by those who plan to use physics in combination with training in some other field, and who do not plan to do graduate work in physics.

A student who plans to do graduate work in physics will be expected to take 31 units of upper division physics, Mathematics 1, 65, 151, and not less than six units selected from Mathematics 119, 152, 185, and 210. The student also will be expected to establish a good foundation in chemistry and to acquire a reading knowledge of German. Courses in descriptive geometry and engineering drawing are recommended.

All students concentrating in physics will consult with the physics staff about their concentration examination during the first week of their senior year.

1a, 1b. INTRODUCTION TO PHYSICAL SCIENCE. *Mr. Miller*. A non-mathematical course intended for those who wish to obtain a knowledge of the fundamental facts, theories and applications of physics. The lectures will be illustrated by numerous experimental demonstrations and the subject will be developed from the basis of the discrete structure of electricity and matter. Fee \$5.00 each semester. 3 units. *MWF, 10.*

51a, 51b. GENERAL PHYSICS. *Mr. Fowler*. A study of the phenomena and laws of mechanics, heat, wave motion, sound, electricity, magnetism, and light. This

course is designed to furnish a working knowledge of the basic principles of physics and is planned especially for those students who expect to continue studies in physics, chemistry, engineering or medicine. Prerequisite, Mathematics 1a-1b preceding or accompanying the course. 4 units. Laboratory fee \$4.00. *TThS*, 8. Laboratory *MTW* or *Th*, 1:15-4:05.

10. HEAT AND THERMODYNAMICS. *Mr. Henke*. A course dealing with the principles of thermodynamics and the theory of heat. The first and second laws of thermodynamics and their application to liquids, vapors, and gases will be emphasized. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF*, 11.

13a, 113b. MECHANICS. *Mr. Henke*. Kinematics, dynamics, and statics of particles and rigid bodies with applications to problems of physics and engineering. Prerequisite, Physics 51, Mathematics 65. 3 units. *TThS*, 9.

14a, 141b. ELECTRICITY AND MAGNETISM. *Mr. Miller*. A course in the theory of electricity and electromagnetism. Emphasis will be placed on the fundamental laws of electrostatics and electrodynamics, electrical circuit theory, and introductory electromagnetic field theory. Prerequisite, Physics 51, Mathematics 151 preceding or accompanying the course. 3 units. *TThS*, 8.

14a, 142b. ELECTRICAL MEASUREMENTS. *Mr. Miller*. Laboratory in electrical and electromagnetic measurements. The first semester is concerned with direct-current measurements and the use of standard bridge circuits. The second semester emphasizes alternating-current circuits and the modern vacuum tube devices commonly employed in physical and engineering laboratories. 1 unit. Laboratory fee \$4.00. *T*, 1:15-4:05.

13. OPTICS. *Mr. Fowler*. The fundamentals of geometrical optics. Theory and applications of physical optics with emphasis upon the phenomena of interference, diffraction and polarization of light. Prerequisite, Physics 51, Mathematics 65. 3 units. First semester. *MWF*, 9.

14. OPTICAL MEASUREMENTS. *Mr. Henke*. Experimental study of phenomena of geometrical and physical optics. Laboratory to accompany Physics 153. 1 unit. First semester. Laboratory fee \$4.00. *F*, 1:15-4:05.

15. ATOMIC STRUCTURE. *Mr. Fowler*. An introduction to modern theories of atomic and nuclear structure, elementary particles, and radiations. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF*, 9.

16. ADVANCED PHYSICS LABORATORY. *Mr. Henke*. Independent experimental study of selected subjects in modern physics. Prerequisite, approval of the instructor. 1 unit. Second semester. Laboratory fee \$4.00. *F*, 1:15-4:05.

11a, 191b. MATHEMATICAL PHYSICS. *Mr. Fowler*. Application of mathematics to selected subjects in classical and quantum physics. Prerequisite, approval of the instructor. 3 units. *TThS*, 10.

Psychology

Students concentrating in psychology are required to take psychology 51, and 24 units of upper division courses including psychology 109 and 194. As a part of the latter requirement, 6 units may be offered from the following courses: Biology 112, Zoology 121, Government 160, Mathematics 194, Sociology 152. Students should note that some of these courses are not offered every year. Training in zoology, physics, chemistry, French and German is recommended for students planning to do graduate work in psychology. Psychology 51b or 52 and 53 is prerequisite to all further work in the department with the exception of Psychology 102. Child Psychology may be taken concurrently with 51b.

51a, 51b. **INTRODUCTION TO PSYCHOLOGY.** *Staff.* Fundamental facts and principles of consciousness and behavior. The relation of the nervous system to mental processes and action. Practical applications in various fields. 3 units. Three sections, *MWF, 10, 11, and TThS, 9.*

102. **PSYCHOLOGICAL STATISTICS.** *Mr. Stevenson.* Correlation methods, probability, chi square, tests of significance. Prerequisite: Psychology 51 or permission of instructor. 3 units. First semester. *TTh, 1:15-3:05.*

103. **INDIVIDUAL DIFFERENCES.** *Mr. Ellis.* A study of the nature and extent of individual differences and their causes as determined by objective methods. Age, sex, and race differences. Genius, subnormality, insanity and criminality. The organization of mind. Applications in various fields are considered briefly. 3 units. Second semester. *MWF, 9.*

107. **EDUCATIONAL PSYCHOLOGY.** *Mr. Ellis.* Practical applications of psychology to education. The nature of the learner; intelligence and motivation; principal features of the learning process. 3 units. Second semester. *MWF, 11.*

108. **CHILD PSYCHOLOGY.** *Mr. Stevenson.* A survey of development and behavior of the young child. Prerequisite: Psychology 51a or 52. 3 units. First semester. *TThS, 10.* Second semester. *TThS, 9.*

109. **INTRODUCTION TO PSYCHOLOGICAL METHODS.** *Mr. Greenspoon.* Discussion and demonstration of methods of studying psychological problems and evaluating data. Laboratory experiments. Laboratory fee \$1.50. Prerequisite: Psychology 51 or permission of instructor. 3 units. First semester. Lecture *M, 8,* laboratory, *WF, 1:15-3:05.*

117. **PHYSIOLOGICAL PSYCHOLOGY.** *Mr. Stevenson.* Physiological and neural aspects of psychological functions. Permission of instructor required. 3 units. (Omitted in 1952-53.)

131. **ABNORMAL PSYCHOLOGY.** *Mr. Greenspoon.* Problems of maladjustment; factors contributing to mental disorders; methods of diagnosis and therapy. Prerequisite: Psychology 51 or 52. 3 units. First semester. *MWF, 10.*

7. ASSESSMENT OF PERSONALITY. *Mr. Greenspoon*. Concepts regarding the nature and organization of personality; techniques for testing or evaluating personality characteristics. Prerequisites: Psychology 108, 131. 3 units. Second semester. *MWF, 10*.
4. SOCIAL PSYCHOLOGY. *Mr. Greenspoon*. Cultural determinants of behavior; dynamics of interpersonal relations and group action; methods of studying social behavior. 3 units. Second semester. *TThS, 9*.
6. MENTAL TESTS. *Mr. Greenspoon*. Survey of principles and methods of measuring intelligence. 3 units. First semester *MF, 2:15-3:05, W, 1:15-3:05*.
8. MENTAL TESTS PRACTICUM. *Mr. Greenspoon*. Supervised experience in administering individual mental tests. Prerequisites: Psychology 102, 137, 156, and permission of instructor. 3 units. Second semester. *M, 2:15-4:05* and arranged.
8. ADVANCED CHILD PSYCHOLOGY. *Mr. Stevenson*. The study of later childhood and adolescence. Prerequisites: Psychology 108. 3 units. Second semester. *ThS, 10*.
0. THEORIES OF LEARNING. *Mr. Greenspoon*. Consideration of the leading theories concerning the nature of learning and its significance for general psychology. Prerequisite: 12 units of psychology. 3 units. Second semester. *WF, 11*. (Omitted in 1952-53.)
2. SYSTEMS OF PSYCHOLOGY. *Mr. Stevenson*. A discussion of contemporary systems of psychology with special emphasis placed upon Behaviorism, Gestalt psychology, and Psychoanalysis. Prerequisite, Psychology 51. 3 units. (Omitted 1952-53.)
8. EXPERIMENTAL PSYCHOLOGY. *Mr. Greenspoon*. Analysis of the design and methodology of recent psychological experiments. Students will perform illustrative experiments. Laboratory fee \$1.50. 3 units. Second semester. *M, 8; Th, 1:15-3:05*.
4. SENIOR READING COURSE. *Mr. Ellis*. A course designed to supplement and integrate the different courses offered to meet the concentration requirement in psychology and to prepare students for the comprehensive examination. Required of seniors who are concentrating in psychology. 2-4 units. Other semester. *T, 3:15* and arranged.

AVAILABLE AT SCRIPPS COLLEGE

- IV-110. GROWTH AND DEVELOPMENT OF THE CHILD. *Mrs. Jones*. Prerequisite, Elementary Psychology. Year course. *MWF, 11*.
- IV-112. CHILD STUDY IN THE NURSERY SCHOOL. *Mrs. Jones*. Prerequisite, Elementary Psychology and IV-110. Year course. *MW, 2:15* and arranged. Others in the Nursery School. Registration by permission of the instructor.

IV-114. NURSERY SCHOOL PROCEDURE. *Mrs. Jones*. Prerequisite, IV-112. Year course. *MW*, 3:15-4:05 and arranged hours in the Nursery School. Registration by permission of the instructor.

V-119. HUMAN PSYCHOBIOLOGY. *Mr. Caster*. Registration by permission instructor. Year course. *TThS*, 8.

Religion

Students planning to concentrate in religion must take the following lower division courses or their equivalents: Religion 1, 2, and 65; History 1, and Philosophy 55. Twenty-four hours of upper-division work, of which eighteen must be in the field of religion, are required. Six units of upper-division courses may be taken in the related fields of English, government, history, philosophy, psychology, and sociology.

Students transferring to Pomona at the beginning of the Junior year may concentrate in religion if lower division requirements have been met prior to entrance or can be met during the Junior year.

1. THE RELIGION OF THE OLD TESTAMENT. *Staff*. A course designed as a general introduction to Old Testament religious ideas. The developing belief and practices of Hebrew religion will be considered in their historical sequence beginning with the patriarchal period and ending with Judaism of the second century before Christ. 3 units. First semester. Four sections. *MWF*, 8, 9; *TThS*, 8, 9.

2. THE RELIGION OF THE NEW TESTAMENT. *Staff*. A course designed as a general introduction to New Testament religious ideas. Attention will first be given to the teaching of Jesus, followed by a study of the message of Paul and a consideration of the developing religious views of the early Christian community. 3 units. Second semester. Four sections. *MWF*, 8, 9; *TThS*, 8, 9.

65a, 65b. GREAT PERSONALITIES IN CHRISTIAN HISTORY. *Mr. Shows*, *Mr. von Rohr*. A survey of the development of Christian beliefs as reflected in the thought of some of the outstanding representatives of the Christian tradition. Among persons studied during the first semester will be Paul, Augustine, Francis of Assisi, and Thomas Aquinas, and during the second semester Erasmus, Luther, Calvin, George Fox, and John Wesley. 3 units. *MWF*, 8.

101. PHILOSOPHY OF RELIGION. *Mr. Sontag*. A course for the general student, aiming to clarify problems of religion confronting the modern mind. Discussion will center around such topics as the existence and nature of God, the nature of man, the problem of evil, and the questions of prayer and immortality. 3 units. First semester. *MWF*, 9.

102. CONTEMPORARY RELIGIOUS THOUGHT. *Mr. Shows*. Reading and discussion of major writings reflecting varying interpretations of the Christian mes-

ge in the modern day. Significant representatives of contemporary religious thinking in both Europe and America will be studied. 3 units. Second semester. *MWF, 11.*

7. THE LIFE AND TEACHINGS OF JESUS. *Mr. Rankin.* A study of the content the New Testament records concerning Jesus. Attention will first be given the facts and theories related to his life, followed by a consideration of the content and purpose of his teaching and its relevance for the modern day. Opportunity will be provided for class reports and discussion. 3 units. First semester. *MWF, 10.*

8. THE LIFE AND MESSAGE OF PAUL. *Mr. Rankin.* An investigation of Paul's life in the growth of the early Christian Church. Attention will be given to the major events of his career and to the emergence of his message out of the conflicts of first century religious thought. Opportunity will be provided for class reports and discussion. 3 units. Second semester. *MWF, 10.*

9. RELIGIOUS THOUGHT IN THE NINETEENTH CENTURY. *Mr. Shows.* A consideration of the roots of present day religious thought as seen in the major writings of the nineteenth century. Both liberal and conservative trends will be considered. 3 units. First semester. *MWF, 11.* (Omitted in 1952-53.)

10. CHRISTIAN ETHICS. *Mr. Shows.* A survey of the basic ethical insights and teachings of the Hebrew-Christian tradition. This study will consider both the contributions of outstanding thinkers in the course of Hebrew-Christian history and the major issues which they confronted in the shaping of their ethical thought. 3 units. First semester. Arranged.

11. CHRISTIANITY AND MODERN SOCIETY. *Mr. Shows.* A study of the tensions which Christianity faces in its application to problems of the political, economic, and social orders. Roles of both the Christian individual and the Christian group will be considered. 3 units. Second semester. Arranged.

12. CATHOLICISM AND PROTESTANTISM. *Mr. von Rohr.* A study of the significant similarities and differences in the two major strains of the Christian tradition. Attention will first be given to an understanding of Roman Catholic beliefs and practices, followed by a study of Protestantism in both its original and modern forms. 3 units. Second semester. *MWF, 9.* (Omitted in 1952-53.)

13a, 191b. ADVANCED READINGS IN RELIGION. *Staff.* An independent reading program for students concentrating in the field of religion. 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

140a, 140b. LIVING RELIGIONS OF THE WORLD. *Mr. Hogue.* Open to freshmen by permission. *TTh, 8* and arranged.

141a, 141b. CHRISTIANITY IN AMERICA SINCE 1865. *Mr. Hogue.* Admission by permission of instructor. Arranged.

Romance Languages and Literatures

Concentration in the Romance Languages is designed for students who are planning to teach one or more of the group, or to enter some form of foreign service, or for those who wish to develop an appreciation of the culture involved. Preparatory work in Latin is recommended and will be found very helpful. Attention is called to the fact that the intermediate courses in French and Spanish meet Lower Division Requirement 6.

A student planning to concentrate in a single Romance Language is required to take at least 24 units in courses numbered over 100 in the language selected. Work in this language should, if possible, have been started before entering college.

For a concentration in a combination of the Romance Languages, 36 hours of upper division work are required.

Students who expect to teach one of the Romance Languages are urged to take work in at least one other language of the group.

Related subjects recommended for students concentrating in the department: English Literature, Comparative Literature, History, Philosophy, History of Art, Music Appreciation.

FRENCH

Courses for concentration: Any courses numbered over 100. Of the course on the literature, French 120 should be taken first.

1A-1B. ELEMENTARY. *Mr. Crowell, Mr. Leggewie.* Essentials of grammar, dictation and speaking. A cultural approach with the emphasis on the acquisition of reading ability. Extensive outside readings in addition to the work in class. This course is the normal preparation for French 51; however superior achievement may admit to French 81. Students with a special interest in conversation should enroll concurrently in French 2. 3 units. 2 sections. *MWF, 10 TThS, 9.*

2A, 2B. ELEMENTARY CONVERSATION. *Mr. Leggewie.* A course in spoken French to accompany French 1 and open only to students enrolled in that course, except with the consent of the instructor. Outside preparation will be kept to a minimum. 1 unit. *WF, 11.*

51A-51B. INTERMEDIATE. *Mr. Leggewie, Miss Obrecht.* A course designed for those students who have completed two years of high school French, or six units of college French. Grammar review and conversational practice; intensive class reading of selected modern short stories, plays and novels of literary value; extensive outside readings in various literary types selected according to the needs and special interests of the individual student; written reports. Through readings and class discussions the student in this course will become acquainted with modern French writers in a variety of literary types. Normally followed by French 81, but superior achievement in this course may admit to upper division work. 3 units. Two sections. *MWF, 11; TThS, 8.*

101a, 61b. INTERMEDIATE CONVERSATION. *Miss Obrecht*. A course in spoken French stressing fluency and accuracy through the use of dialogues, reports and recording machines. Outside preparation will be kept to a minimum. Students enrolled in this course must also be enrolled in French 51 or a higher course, or must have the consent of the instructor. 1 unit. *WF*, 1:15.

101a-81b. ADVANCED INTERMEDIATE. *Miss Obrecht*. A course designed for students who have completed French 1 and 51, or for freshmen who have had three or more years of high school French. Conducted in French as far as possible. Rapid grammar review; extensive class and outside readings at a higher level than in French 51; written reports in French. Through class and outside readings the student in this course should make the acquaintance of a considerable number of modern writers in a variety of literary genres. 3 units. *MWF*, 9.

101a-120b. SURVEY OF FRENCH LITERATURE AND CIVILIZATION. *Miss Obrecht*. Outline of the development of French literature and culture. Readings of selections to give the student a comprehensive view of the history of the literature and life of the French. 3 units. *MWF*, 10.

101a, 124b. THE NOVEL OF THE NINETEENTH CENTURY. *Mr. Leggewie*. Intensive study of the novel and its evolution as a reflection of the intellectual, historical and literary movements of the century. Representative writers studied are, in the first semester, Mme. de Stael, Chateaubriand, Sand, Stendahl and Balzac; in the second semester, Flaubert, the Goncourt brothers, Zola and Proust. 3 units. Alternates with French 153. *TTh*, 2:15-3:30.

101a-141b. ADVANCED CONVERSATION AND COMPOSITION. *Mr. Leggewie*. A course conducted entirely in French. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of a correct pronunciation and intonation. Open to students who have completed French 81 or equivalent. 3 units. *TThS*, 10.

101a, 153b. LITERATURE OF THE SEVENTEENTH CENTURY. *Mr. Leggewie*. Intensive study of the great masters of the French classical age: Corneille, Molière, Racine. Lesser study of Descartes, Pascal, La Rochefoucauld, La Fontaine and others. Historical background; lectures; reading assignments; written reports in French. Alternates with French 124. 3 units. *TThS*, 8. (Omitted in 1952-53.)

ITALIAN

101a-61b. ELEMENTARY. *Mr. Crowell*. A rapid survey of the grammar with special emphasis on the pronunciation. Extensive reading of modern prose. A thorough grounding in French, Spanish or Latin is strongly recommended. 3 units. *MWF*, 11.

SPANISH

Courses for concentration: Any courses numbered over 100. Of the courses in the literature, Spanish 113, 114 should be taken first. For concentration in

the field of Latin American Civilization, see page 79; the concentration International Relations, page 77.

11a-11b. **ELEMENTARY.** *Staff.* Essentials of grammar; pronunciations; writing and speaking; class readings of easy modern texts; extensive outside reading adapted to the needs and interests of the individual student. This course is the normal preparation for Spanish 71. 3 units. *MWF*, 9.

12a, 12b. **ELEMENTARY CONVERSATION.** *Staff.* Emphasis on the spoken language from the beginning of the course. Drill in pronunciation; class conversation based on a variety of reading assignments. Completion of both Spanish 11 and Spanish 12 prepares for Spanish 91; however, superior achievement may admit to upper division courses. 1 unit. *MW*, 11.

71a-71b. **INTERMEDIATE.** *Staff.* A course designed for those students who have completed two years of high school Spanish, or six units of college Spanish. Grammar review and drill in conversation; intensive class reading of selected modern short stories, plays and novels of literary value; extensive outside readings in various literary types selected according to the needs and special interests of the individual student; written reports. Through these extensive readings it is hoped to give the student an acquaintance with modern Spanish writers in a variety of literary types. Normally followed by Spanish 91, but superior achievement in this course may admit to upper division work. 3 units. *MWF*, 10.

91a-91b. **ADVANCED INTERMEDIATE.** *Staff.* A course designed for students who have completed Spanish 11 and Spanish 71, or for freshmen who have had three or more years of high school Spanish. Conducted in Spanish as far as possible. Rapid grammar review; extensive class and outside readings at a higher level than in Spanish 71; written reports in Spanish. Through class and outside readings the student in this course should make the acquaintance of a considerable number of modern authors in a variety of literary types. 3 units. *TThS*, 10.

113. **MODERN SPANISH THEATRE.** *Staff.* Study of the works of the leading Spanish playwrights from 1800 to the present time. Reading of certain plays in class; reports on individual outside readings. Conducted in Spanish. 3 units. First semester. *TThS*, 9.

114. **MODERN SPANISH NOVEL.** *Staff.* Study of the principal Spanish prose works from 1800 to the present time with emphasis on the novel. Extensive outside readings; written reports. Conducted in Spanish. 3 units. Second semester. *TThS*, 9.

151a-151b. **ADVANCED CONVERSATION AND COMPOSITION.** *Mr. Crowell.* This course conducted entirely in Spanish. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of a correct pronunciation and intonation. Comprehension of the spoken language developed in part through participation in the class activities.

native speakers. Open to students who have completed Spanish 91 or equivalent. 3 units. *TThS*, 10.

171a, 171b. SPANISH LITERATURE FROM 1140 TO 1650. *Mr. Crowell*. Readings from selected masterpieces from earliest times through the Golden Age. Conducted in Spanish. First semester: Poema de mio Cid, El Libro de buen amor, La Celestina, Los Romances, La novela. Second semester: Cervantes, readings from the Quijote and Novelas ejemplares; some typical dramas of Lope de Vega, Ruiz de Alarcón, Tirso de Molina, Calderón de la Barca. 3 units. *MWF*, 8.

173a, 173b. MEXICAN LITERATURE. *Mr. Crowell*. Class study of selected works from colonial times to the present day. Extensive outside readings in the literature and on the history and culture. Individual written reports in Spanish. First semester: The Colonial Period and the Nineteenth Century. Second semester: Contemporary Mexico from 1910 on. 3 units. Alternates with 175. *TTh*, 2:15-3:30.

175a, 175b. SPANISH AMERICAN LITERATURE. *Mr. Crowell*. Class study of outstanding literary works of Hispanic South America. Extensive outside readings; individual reports in Spanish. 3 units. Alternates with 173. *TTh*, 2:15-3:30. (Omitted in 1952-53.)

AVAILABLE AT SCRIPPS COLLEGE

155. SURVEY OF SPANISH LITERATURE. *Mrs. Lamb*. Year course. *MWF*, 11.

156. LATIN AMERICAN THEATRE. *Mrs. Lamb*. Year course. *MW*, 2:15-3:30.

* * *

In the Romance field the graduate work offered under the Claremont Graduate School centers on the following periods of the literature: French: Old French. 17th Century, 18th Century, 19th Century, Contemporary Period. Spanish: Pre-Golden Age, Golden Age, Spanish and Spanish American of 19th Century, and Contemporary Period.

Russian

1-1b. ELEMENTARY RUSSIAN. *Mr. Ein*. Essentials of grammar, pronunciation, constant exercises in reading and writing, practice in speaking. Individual assignments in reading, writing and speech which will correspond to each student's needs and interests. 3 units. *TThS*, 9.

2a, 51b. INTERMEDIATE RUSSIAN. *Mr. Ein*. More advanced Russian language study through daily reading, writing, and translating. Continued practice in Russian conversation. Reading of Russian texts which serve as an introduction to Russian life, history and literature. Reading of selected classics in Russian. Individual assignments will correspond to each student's needs and interests (e.g. Sciences, History, Politics, Military Russian, etc.). 3 units. *TThS*, 10.

101a, 101b. READINGS IN SELECTED RUSSIAN LITERATURE. *Mr. Ein.* Prerequisite: 51a and 51b or equivalent. 1 unit. May be repeated for credit. Arranged.

Sociology

Requirements for concentration: Sociology 51, normally taken in the Sophomore year, and 24 units of upper division courses in sociology. However, 3 of these 24 units may be chosen from the following: Economics 111, Government 157, Psychology 154.

Recommended courses: Students concentrating in sociology will find it helpful to take as many of the following courses as possible: Economics 51 and 52, Economics 57; Government 51 and 52; or Economics 51 and Government 52; History 1; Psychology 51; Religion 142.

Lower Division distribution: Sociology 51 and 52 constitute the integral first-year course for students who expect to take only one year of sociology. For those planning more extensive work in sociology, Sociology 51 and any of the higher numbered semester courses will meet the distribution requirement.

51. INTRODUCTORY SOCIOLOGY. *Staff.* Man's cultural heritage and collective behavior. The origin, structure, and functioning of human groups, and the role in personality and cultural development. The principal social processes: such as competition, conflict, cooperation, and assimilation. Results of social change. Not open to Freshmen. 3 units. First semester. Four sections. *MWF 11, 1:15; TThS, 8, 9.*

52. SOCIAL PROBLEMS. *Mr. Scalf.* A survey of the major problems of present-day society related to individual, family, community, and world disorganization. Typical problems studied are crime, delinquency, alcoholism, marital adjustment, race antagonism, labor relations, migration, and population pressures. Intended to follow Sociology 51 for students who plan to take only one year of sociology. Not recommended for students who intend to take several specialized courses such as Race Relations, Criminology, etc. Prerequisite: Sociology 51. 3 units. Second semester. Two sections. *TThS, 9.*

102. CULTURAL ANTHROPOLOGY. *Mr. Baber.* The emergence of man and development of his essential culture patterns, from Stone Age to Iron Age. The rise of language, writing, art, and the basic social institutions. A comparison of human behavior in widely separated primitive cultures to reveal the constant as well as the variable features of human society. The invention, diffusion, and integration of culture traits in the process of cultural change. Prerequisite: Sociology 51. 3 units. First semester. *MWF, 9.* (Alternate with 109.)

106. SOCIAL WELFARE. *Mr. Scalf.* A survey of the various fields of social work and the major techniques and theories involved. Includes a description and analysis of case work, family welfare, child welfare, child guidance clinics, school social work, probation supervision, medical and psychiatric

case work, group work, public welfare, and community organization. Visits to selected agencies. Prerequisite: Sociology 51. 3 units. Second semester. *MWF*, 8.

107. **CRIMINOLOGY AND PENOLOGY.** *Mr. Baber.* Types of criminal behavior. The making of the criminal; causative factors. Changing interpretations of crime. Methods of dealing with criminals through the police, courts, prisons, probation, and parole. Special treatment of juvenile delinquents; preventive measures. Prerequisite: Sociology 51, or two of the following: Economics 51, Government 51, Political Economy 1, History 1. 3 units. Second semester. Two sections. *MWF*, 9, 11.

109. **MARRIAGE AND THE FAMILY.** *Mr. Baber.* Factors involved in mate selection and the husband-wife and parent-child relationships. Adjustment of marriage and family patterns to our rapidly changing culture. Analysis of the factors promoting family disorganization; measures seeking to conserve the social values of family life. Prerequisite: Junior or Senior standing. 3 units. First semester. (Alternates with 102. Omitted in 1952-53.)

110. **RACE RELATIONS.** *Mr. Baber.* Concepts of race and culture. The nature of race contact and the development of race consciousness and conflict patterns. The experience of several nations with racial minorities, with emphasis upon American experience with Negroes, Mexicans, and Orientals. Some areas and trends of prejudice and discrimination. Prerequisite: Sociology 51, or two of the following: Economics 51, Government 51, History 1. 3 units. Second semester. *WF*, 2:15-3:30. (Alternates with 152.)

111. **POPULATION AND MIGRATION PROBLEMS.** *Mr. Scaff.* Factors influencing population growth or decline. The social and economic effects of an increasing, static, or declining population. The significance of the rates of increase and the different racial, economic, or social elements of the population. Suggested policies for controlling the quantity and quality of the population. Trends of internal migration, especially to the Pacific Coast. Prerequisite: Sociology 51, or sufficient background in the other social sciences to satisfy the instructor. 3 units. First semester. *MWF*, 8. (Omitted in 1952-53.)

112. **THE AMERICAN COMMUNITY.** *Mr. Scaff.* An analysis of modern American urban communities in contrast with rural communities. Urban ecology applied to the Los Angeles area. The community's class structure and institutional composition. Community planning. Approximately half the course devoted to lectures and discussions, half to field investigation and projects in the local area. Prerequisite, Sociology 51 and instructor's permission. 3 units. First semester. *MW*, 2:15-3:55.

113. **SOCIAL CONTROL.** *Mr. Baber.* An analysis of human nature and its social origin. The evolution of social control and its increasing complexity, due to the acceleration of social change in modern culture. Society's means of creating and maintaining its social patterns, through law, public opinion, propaganda, education, religion, rewards, etc. Individual control versus social

control. Open to Juniors and Seniors only. Prerequisite, Sociology 51. 3 units. Second semester. (Alternates with 110. Omitted in 1952-53.)

153. THEORIES OF SOCIAL REFORM. *Mr. Scaff.* A study of various proposals for social reconstruction including: the Utopians, Marxian Socialism, Fabian Socialism, Syndicalism and Guild Socialism. An investigation of contemporary experiments in social reorganization: the British Labor Movement, German Nazism, Italian Fascism, Russian Communism, and the Cooperative Movement at home and abroad. Prerequisite: Sociology 51, or *two* of the following: Economics 51, Government 51, History 1. Open to Juniors and Seniors only. 3 units. First semester. *MWF, 10.*

154. TWENTIETH CENTURY SOCIOLOGY. *Mr. Scaff.* The rise of modern sociology from the time of Comte and Spencer. Attention to various movements of social thought. Emphasis on the major contributions from Europe and America to sociological theory since 1900. Prerequisite: Sociology 51. Open to Juniors and Seniors only. 3 units. Second semester. *MWF, 10.*

191A-191B. SOCIAL INVESTIGATION. *Mr. Baber.* Methods of investigation and research as applied to both individual and group work. The effective presentation of social data. Observation and analysis of the work of various social agencies and programs. Individual projects for some; supervised field experience (in selected agencies) for others, according to the interests and needs of the student. Open only to seniors with the written permission of the instructor. 3 units. Arranged.

Speech and Dramatics

Requirements for concentration:

Lower Division Courses: Speech and Dramatics 32a, 32b, 51 (at least 3 units), 57, 61a, 61b, and History 1A-1B, in fulfillment of which requirements transfer students may offer equivalent courses pursued at other colleges.

Upper Division Courses: Speech and Dramatics 134a, 134b, 160A-160B, English 155a, 155b and Scripps II-150 or Comparative Literature 181a, 181b or Speech and Dramatics 112A-112B or 131a, 131b. Fluency in at least one modern foreign language (preferably French) is recommended.

In the comprehensive examination the books on a supplementary reading list will be included.

In addition to the comprehensive examination, a demonstration of creativity in the field of concentration is required.

In addition to the required work in the Speech and Dramatics concentration the following offerings are suggested as suitable electives, the choice among them depending on the student's particular interests: *Lower Division:* 32a-32b and 51A-51B, Music 53A-53B, Speech and Dramatics 52a, 52b and 53b, English 50a, 50b, 58, and 64. *Upper Division:* Art 105A-105B, Mu

03a-103b, Physical Education 130a, 130b, Spanish 113 and 114, French 20a-120b, Scripps I-106 and I-107, English 103a, 103b, 111, 151.

2a, 32b. VOICE AND DICTION. *Mr. Scott.* Study of the mechanics of voice production and of the elements of English phonetics. Practice designed to develop good voice and diction. Permission of the instructor required for registration. 2 units. *MW*, 11.

1a, 51b. PLAY PRODUCTION. *Staff.* Directed study in play production, both acting and in the technical problems of the stage. One unit of credit may be granted for either fifty hours of rehearsal time under direction, or fifty hours of technical work under direction, or for fifty hours of rehearsal and technical work combined. Not more than two units of credit may be granted in any one year. A total of eight units of credit may be applied toward graduation.

2a, 52b. FUNDAMENTALS OF SPEECH. *Mr. Scott.* Exercise in voice development and platform deportment. Training in analysis of subjects, selection and arrangement of material, psychological adaptation of material and treatment to specific audiences. 2 units. *MW*, 9.

3a, 53b. PRINCIPLES OF INTERPRETATIVE READING. *Mr. Scott.* Study of the technique of effective oral interpretation of literature. Application of this technique in the reading of various literary types. 2 units. *TTh*, 10.

5a, 55b. ARGUMENTATION AND DEBATE. *Mr. Scott.* Study of the principles of argumentation and practical application of these principles in class debates. Debate subjects for the year analyzed and debated. 2 units. *Th*, 2:15-3:55.

6a, 61b. CHARACTER PRESENTATION IN DRAMATIC LITERATURE. *Mrs. Allen.* An approach to dramatic literature through the actor's art. A study of theories of acting and principles of stage behavior. Pantomime and improvisation to develop concentration, observation, imagination, co-ordination, and control. Scenes from plays, both classic and modern, will be studied with emphasis on interpretation. Permission of instructor required. 3 units. *ThS*, 10.

12a-112b. PLAYWRITING. *Mrs. Allen.* The theory of playwriting with supervised practice in this technique. A study will be made of the structure and style of significant plays for their light on the problems of the beginning playwright. Permission of instructor required. Alternates with Speech and Dramatics 160. 3 units. *TThS*, 9. (Omitted in 1952-53.)

11a, 131b. ADVANCED SPEECH. *Mr. Scott.* Training in the construction and delivery of formal addresses. Prerequisite, Speech and Dramatics 52 or equivalent. 2 or 3 units. *TTh*, 9.

14a, 134b. READING OF DRAMATIC LITERATURE. *Mr. Scott.* Intensive study of a limited number of standard plays, with emphasis on dramatic values in character and plot. Interpretative reading of these plays in class. Recital

programs before the class. Prerequisite, Speech and Dramatics 53 or equivalent. 3 units. MWF, 10.

160a-160b. THEATRE PRACTICE. *Mrs. Allen*. A survey of historical backgrounds of stage forms and of contemporary production methods. A study of theories, problems, and techniques of production applied to plays of various types. Analysis of problems confronting the theatre worker, in acting, direction, design, criticism, and management. Practical experience in directing a short play. Advanced problems in the analysis and presentation of characters with concentration on *styles* of acting. Representative plays of various periods (Greek, Elizabethan, Restoration, Eighteenth Century, Modern) will be used for study and practice. 3 units. Alternates with Speech and Drama 112. TThS, 9.

INTRODUCTION TO DRAMA. For description see English 57.

SHAKESPEARE. For description see English 155a, 155b.

AVAILABLE AT SCRIPPS COLLEGE

11-149. THEORY OF DRAMATIC PRODUCTION. *Mr. Workman*. Year course. MWF, 1:15-3:05.

11-150a, 150b. HISTORY OF THEATRE AND DRAMA. *Mr. Workman*. MWF,

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POMONA COLLEGE CAMPUS PLAN

(See map on opposite page)

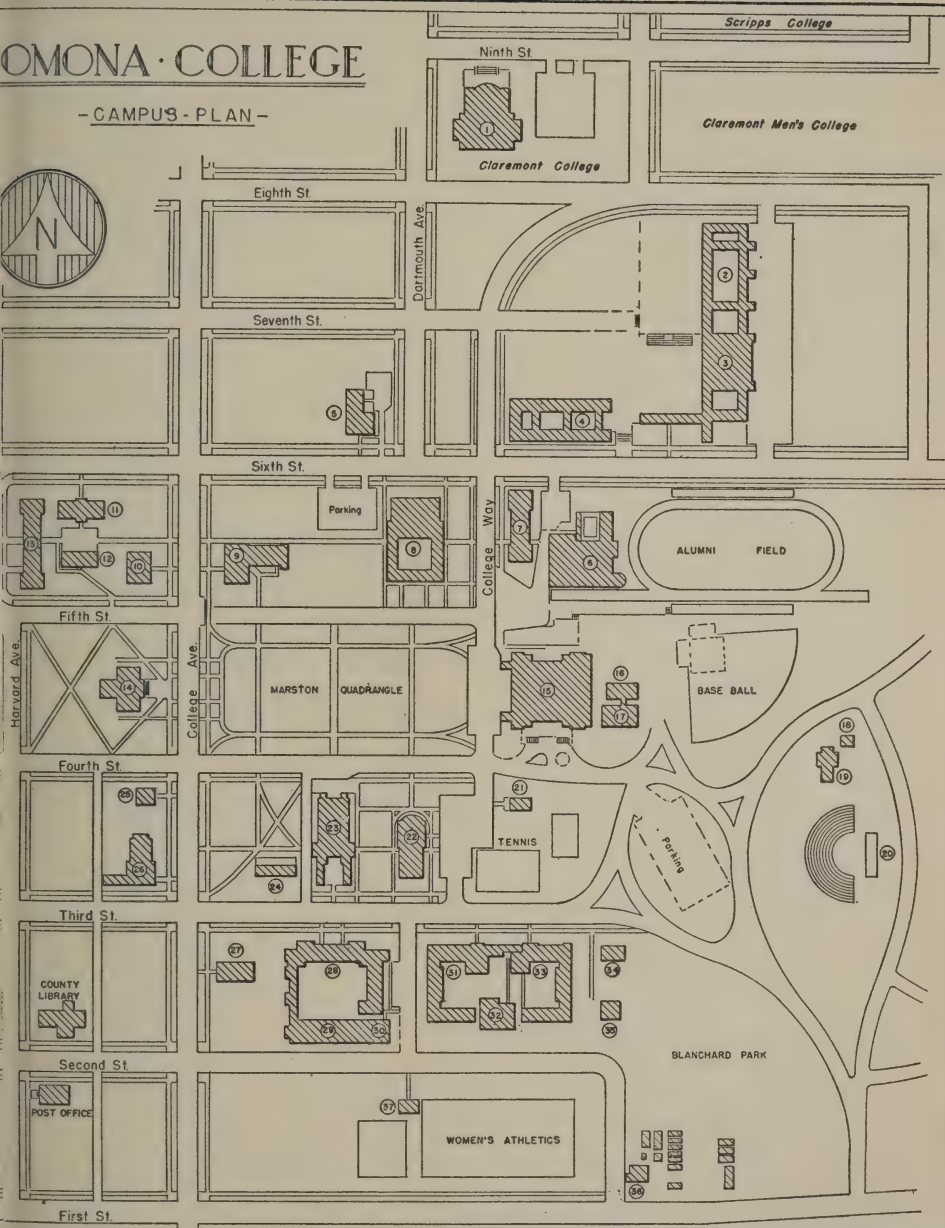
1. Honnold Library for the Associated Colleges.
2. Eli P. Clark Hall, residence for men.
3. Frary Hall, central dining hall for men.
4. Eli P. Clark Hall, residence for men.
5. Baxter Medical Building for the Associated Colleges.
6. Memorial Gymnasium and Swimming Pool.
7. Smiley Hall, residence for men.
8. Edmunds Union, including student offices, cooperative store, ballroom and lounges.
9. Holmes Hall, classrooms and assembly hall.
10. Pearsons Hall, physics laboratory, mathematics department.
11. Crookshank Hall, botany, biology, and zoology laboratories.
12. Harwood Hall, department of psychology.
13. Mason Hall, chemistry and geology laboratories.
14. Carnegie Building.
15. Mabel Shaw Bridges Auditorium, auditorium seating 2600, operated by Claremont College in behalf of the Associated Colleges.
- 16-17. Renwick Gymnasium.
18. Seaver Laboratory, containing classrooms and library for the department of astronomy.
19. Frank P. Brackett Observatory.
20. Open-Air Theatre.
21. Replica of original home of Pomona College.
22. Sumner Hall, administration and classroom building.
23. Mabel Shaw Bridges Hall of Music, assembly hall for recitals and chapel services; music studios and practice rooms.
24. Rembrandt Hall, art studios.
25. President's House.
26. Claremont Inn, guest house for college and community, private and public dining rooms.
27. Baldwin House, residence for women.
28. Harwood Court, residence hall for women.
29. Aurelia Squier Harwood Memorial Dining Hall for women.
30. Mary McLean Olney Dining Hall for women.
31. Della Mulock Mudd Hall, residence for women.
32. Jessie E. Gibson Dining Hall for women.
33. Florence Carrier Blaisdell Hall, residence for women.
34. Brackett House, residence for women.
35. Kenyon House, residence for women.
36. Heating Plant and Maintenance Shops for the Associated Colleges.
37. Field House for women's athletics.

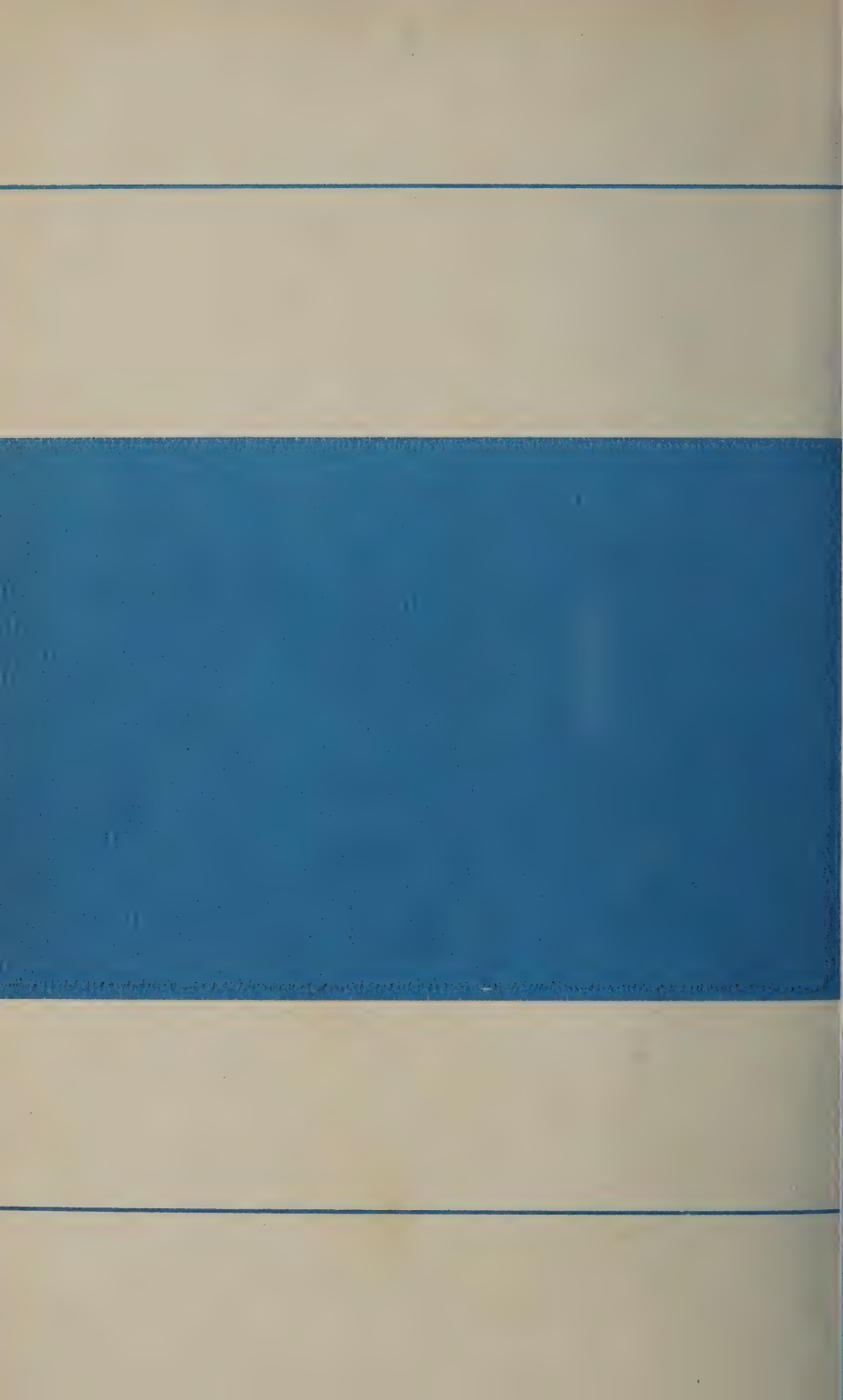
The Business Office for the Associated Colleges is located in Harper Hall at College and Tenth Streets.

The Infirmary for the Associated Colleges is located on Amherst Avenue north of Foothill Blvd.

OMONA · COLLEGE

- CAMPUS · PLAN -





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ANNUAL CATALOG NUMBER

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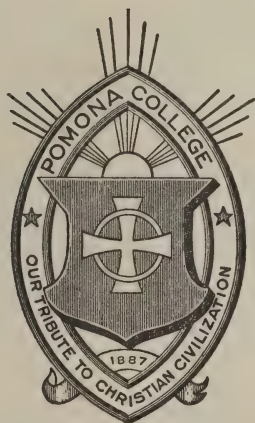
APRIL, 1953

No. 8

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1953-1954



Pomona College

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CALENDAR FOR 1953

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COLLEGE CALENDAR FOR 1953-54

FIRST SEMESTER

SEPTEMBER 18, FRIDAY	Residence halls open for new students only, 12 noon. First meal served, dinner at 6 p.m. Meeting of Joint Committee
SEPTEMBER 18-21	Program for new students
SEPTEMBER 19, SATURDAY	Faculty Meeting, 10 a.m.
SEPTEMBER 21, MONDAY	Conference Day and Registration for new students
SEPTEMBER 22, 23 TUESDAY AND WEDNESDAY	Registration for returning students. Residence halls open for returning students. First meal served to returning students, breakfast, Tuesday.
SEPTEMBER 24, THURSDAY	First semester classes begin, 8 a.m. Opening Convocation, 11 a.m.
OCTOBER 8, THURSDAY	Last day for entering courses
OCTOBER 15, THURSDAY	Founders Day, Flame Ceremony, 11 a.m.
NOVEMBER 2, MONDAY	First low grade report due
NOVEMBER 5, THURSDAY	Final day for withdrawal from classes without penalty
NOVEMBER 25, WEDNESDAY	Thanksgiving recess begins, 9:30 p.m.
NOVEMBER 30, MONDAY	Thanksgiving recess ends, 8 a.m.
DECEMBER 7, MONDAY	Second low grade report due
DECEMBER 18, FRIDAY	Christmas vacation begins 4:15 p.m.
JANUARY 4, MONDAY	Christmas vacation ends, 8 a.m.
JANUARY 23, SATURDAY	Last day of classes
JANUARY 25, MONDAY	Final examinations begin
FEBRUARY 3, WEDNESDAY	Final examinations end
FEBRUARY 6, SATURDAY	First semester ends

COLLEGE CALENDAR FOR 1953-54

SECOND SEMESTER

FEBRUARY 8, MONDAY	Opening day for classes at Scripps College, Pomona students enrolled in Scripps courses are expected to attend.
FEBRUARY 9, TUESDAY	Registration for Juniors and Seniors
FEBRUARY 10, WEDNESDAY	Second semester classes begin, 8 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 11, THURSDAY	Opening Convocation, second semester, 11 a.m. Registration for Freshmen and Sophomores, afternoon only.
FEBRUARY 24, WEDNESDAY	Last day for entering courses
MARCH 13, SATURDAY	Matriculation Day
MARCH 22, MONDAY	First low grade report due
MARCH 24, WEDNESDAY	Final day for withdrawal from classes without penalty
APRIL 3, SATURDAY	Spring vacation begins, noon
APRIL 12, MONDAY	Spring vacation ends, 8 a.m.
MAY 1, SATURDAY	Second low grade report due
MAY 22, SATURDAY	Last day of classes for Seniors
MAY 29, SATURDAY	Last day of classes
MAY 30, SUNDAY	Memorial Convocation, 5 p.m.
MAY 31, MONDAY	Final examinations begin
JUNE 6, SUNDAY	Associated Colleges Baccalaureate
JUNE 9, WEDNESDAY	Final examinations end
JUNE 12, SATURDAY	Alumni Day
JUNE 13, SUNDAY	Commencement
JUNE 17, THURSDAY	Scholarship Committee Meeting
JUNE 18, FRIDAY	Joint Committee Meeting

BOARD OF TRUSTEES

OFFICERS

Rudolph J. Wig, *President*
Arthur J. McFadden, *Vice-President*
Fred W. Smith, *Vice-President*

TERM OF OFFICE EXPIRES JUNE, 1953

George S. Sumner, <i>Claremont</i>	Mark H. Harrington, <i>Pasadena</i>
Arthur M. Dole, <i>Pomona</i>	Morris B. Pendleton, <i>San Marino</i>
Mrs. Victor Montgomery, <i>Beverly Hills</i>	George R. Martin, <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1954

Fred W. Smith, <i>Ojai</i>	Roy E. Thomas, <i>Los Angeles</i>
Elmo H. Conley, <i>Pasadena</i>	Paul Fussell, <i>Pasadena</i>
William A. Johnson, <i>San Marino</i>	Robert H. Craig, <i>Palos Verdes Estates</i>

TERM OF OFFICE EXPIRES JUNE, 1955

Frank R. Seaver, <i>Los Angeles</i>	Clarence T. Stover, <i>Claremont</i>
Robert P. Jennings, <i>Sierra Madre</i>	Carl I. Wheat, <i>San Francisco</i>
Paul S. Armstrong, <i>Los Angeles</i>	Herbert S. Rempel, <i>Pasadena</i>

TERM OF OFFICE EXPIRES JUNE, 1956

William B. Himrod, <i>Hollywood</i>	Yale B. Griffith, <i>Santa Barbara</i>
Arthur J. McFadden, <i>Santa Ana</i>	E. Wilson Lyon, <i>Claremont</i>
Charles E. Donnelly, <i>Los Angeles</i>	James W. Fifield, Jr., <i>Los Angeles</i>

TERM OF OFFICE EXPIRES JUNE, 1957

Willis H. Merrill, <i>Long Beach</i>	Rudolph J. Wig, <i>San Marino</i>
George L. Eastman, <i>Hollywood</i>	Frederick S. Bale, <i>Pasadena</i>
William W. Clary, <i>Pasadena</i>	Charles Detoy, <i>Pasadena</i>

HONORARY MEMBERS

Donald G. Aplin, <i>Highland</i>	Luther Freeman, <i>Claremont</i>
William S. Mason, <i>Pasadena</i>	Mary McLean Olney, <i>Berkeley</i>
Ernest E. Jones, <i>Claremont</i>	David P. Barrows, <i>Berkeley</i>
Mary Clark Eversole, <i>La Canada</i>	
George W. Bryant, <i>San Marino</i>	
Seeley G. Mudd, <i>San Marino</i>	

EX-OFFICIO MEMBERS

Managing Director, Claremont College
President of the Alumni Association
President of the Women's Campus Club
President of the Pomona College Associates

FORMER PRESIDENTS OF THE COLLEGE

Cyrus G. Baldwin, 1890 - 1897	Franklin L. Ferguson, 1897 - 1901
George A. Gates, 1901 - 1910	James A. Blaisdell, 1910 - 1928
Charles K. Edmunds, 1928 - 1941	

GENERAL ADMINISTRATION

1953-54

- E. WILSON LYON, *President* 209 Sumner Hall
B.A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; D.Litt., Occidental College.
- PAUL H. BURTON, *Controller* Harper Hall
B.A., Western Reserve University.
- WILLIAM V. SHANNON, *Treasurer* Harper Hall
B.S., Virginia Military Institute.
- MARJORIE B. WOODFORD, *Assistant Treasurer* Harper Hall
B.A., Pomona College; M.A., Columbia University.
- GLENN V. FULLER, *Bursar* Harper Hall
B.A., Ohio State University.
- ALLEN F. HAWLEY,³ *Director of Alumni and Public Relations* 203 Sumner Hall
B.A., Pomona College; Graduate Student, Harvard University.
- WILLIAM B. HIMROD, *Assistant to the President* 203 Sumner Hall
B.A., Pomona College. Graduate Student, University of Southern California.
- JOHN F. MOULDS, *Acting Director of Public Relations* 200 Sumner Hall
Ph.B., University of Chicago.
- KENNETH G. BEYER, *Assistant to the President* 203 Sumner Hall
B.A., M.A., Whittier College.
- VARREN B. KNOX, *Secretary of Pomona College Associates* 200 Sumner Hall
B.A., M.A., Whittier College.
- MORTON C. JOHNSON, *Alumni Secretary* 212 Sumner Hall
B.A., Pomona College.
- KENNETH E. OVERAKER, *Director of the News Bureau* 108 Sumner Hall
- AGNES M. JOHNSON, *Executive Secretary to the President* 209 Sumner Hall

INA T. NIDER, *Social Director, Women's Campus* Harwood Cour
B.A., Fresno State College; M.A., Columbia University.

FRANK C. CHILD, *Director of Men's Campus* Eli P. Clark Ha
B.A., University of Utah; M.A. and Doctoral Candidate, Stanford University.

MAY C. FRANK, *Director of Residence Halls* Mudd Hal
B.S., Columbia University; M.S., Iowa State College.

LUCILLE GRAMSE MCCARTHY, *Director of Dining Halls* Frary Hal
B.S., M.S., Kansas State College of Applied Science.

HAROLD HONORE, *Campus Engineer* 303 E. First St

The Faculty

Date denotes beginning of original term of service

ADMINISTRATIVE OFFICERS

WILSON LYON

345 College Ave.

President, 1941.

A., University of Mississippi; B.A. and B.Litt., University of Oxford; Ph.D., University of Chicago; LL.D., Colgate University; Litt.D., Occidental College.

RAYMOND IREDELL

1060 College Ave.

Dean of the Faculty, and Professor of Philosophy on the Robert C. Denison

Foundation, 1925.

A., Pomona College; M.A., Ph.D., Harvard University.

WARD SANDERS

Dean of Students and Dean of Admissions, 1942.

A., Hendrix College; M.A., Ph.D., Columbia University.

ON L. BEATTY

Dean of Men, 1949.

A., University of Tennessee; M.A., Cornell University; Doctoral Candidate, Stanford University.

B. WALTON

147 E. Twelfth St.

Dean of Women on the Martha N. Hathaway Foundation, 1949.

A., Swarthmore College; M.A., Brown University; Ph.D., University of Pennsylvania.

RET MAPLE

4326 Via Padova

Registrar, 1940.

A., Pomona College.

AM L. WHEATON

328 Oakdale Drive

Assistant Dean of Admissions, 1949.

A., Pomona College; M.A., New York University.

W. DAVIES

524 W. Tenth St.

Librarian, 1947.

A., University of California at Los Angeles; M.A., University of California; Ph.D., University of Chicago.

RT S. COLTRIN

455 W. Twelfth St.

Physician of the Associated Colleges, 1940.

A., Pomona College; M.D., University of Rochester. Intern, Resident in Medicine, University of California Hospital; Fellow in Urology, Presbyterian Hospital, New York City; Exchange Fellow in Physiology, University of Kiel, Germany.

TT FOX

1390 Via Zurita

Assistant Physician of the Associated Colleges, 1952.

A., Ph.D., Cornell University; M.D., Stanford University.

OBERT RANKIN

Chaplain of Associated Colleges Church, 1951.

A., State University of Iowa; B.D., M.A., Yale University.

EMERITI

- WALTER ALFRED ALLEN 175 E. Twelfth
Emeritus Professor of Musical Theory and Appreciation, 1912.
 B.A., Beloit College; B.Mus., Yale University. Associate, American Guild of Organists.
- GRACE ELLA BERRY 353 W. Eleventh
Emeritus Dean of Women and Associate Professor of Mathematics, 1909.
 B.S., M.A., Mount Holyoke College.
- BERNARD CAPEN EWER 706 Indian Hill
Emeritus Professor of Psychology, 1916.
 B.A., M.A., Brown University; Ph.D., Harvard University.
- MARION JEANETTE EWING 455 W. Seventh
Emeritus Assistant Librarian, 1912.
 B.A., Olivet College; B.S., Simmons College; M.A., Boston University.
- CHARLES TABOR FITTS 4435 N. Live Oak
Emeritus Professor of Education, 1919.
 B.A., Amherst College; M.A., University of California. Graduate study, University of California.
- JESSIE EDITH GIBSON 445 Grinnell
Emeritus Dean of Women on the Martha N. Hathaway Foundation, 1927.
 B.A., University of Idaho; M.A., University of Washington. Graduate study, California and Columbia Universities.
- WILLIAM ATWOOD HILTON 1293 Dartmouth
Emeritus Professor of Zoology on the Willard George Halstead Foundation, 1912.
 B.S., Ph.D., Cornell University.
- ERNEST E. JONES 905 College
Treasurer Emeritus, 1909.
 B.A., Pomona College.
- CYRIL JURECKA 163 W. Eleventh
Emeritus Assistant Professor of Art, 1932.
 Graduate, Imperial and Royal College of Sculpture, Horice, Bohemia.
- WILLIAM KIRK 705 Indian Hill
Emeritus Professor of Sociology on the Henry Snyder Foundation, 1922.
 B.A., Ph.D., Johns Hopkins University.
- ELLIOTT CURTIS LINCOLN 472 W. Tenth
Emeritus Professor of English on the Phebe Estelle Spalding Foundation, 1924.
 B.A., Colby College; M.A., State College of Washington and Harvard University.
- RALPH HAINE LYMAN 357 W. Tenth
Emeritus Professor of Applied Music, Head of Department of Music, 1917.
 B.A., Grinnell College. Student in voice with Karleton Hackett, William B. Grant Hadley, Arthur Middleton, Courtland Cooper, Holmes Cowper and American masters and with Vittorino Moratti in Berlin. D.Mus., Grinnell College.
- HELEN MARBURG 446 Grinnell
Emeritus Associate Professor of Romance Languages, 1940.
 B.A., University of London; Ph.D., Stanford University.

MCCULLEY 210 E. Foothill Blvd.
Emeritus Professor of English Literature. 1921.
 A., Hiram College; M.A., University of Chicago; Ph.D., Harvard University.

AM EVAN NICHOLL 240 E. San Jose
Emeritus Dean of Students. 1919.
 A., Bellevue College; M.A., Columbia University. Graduate study, Edinburgh University.

WHITE NIXON 3163 Indian Hill Blvd.
Emeritus Professor of Physical Education for Men. 1916.
 A., Monmouth College; M.A., Columbia University. Graduate study, Illinois and California Universities.

TT SAMUEL OLIVE South Laguna
Emeritus Professor of Piano. 1923.
 Mus., Simpson College. Graduate study, Simpson College.

MIN DAVID SCOTT 828 College Ave.
Emeritus Professor of Public Address. 1923.
 A., University of Southern California; S.T.B., Ph.D., Boston University. Graduate work, Brown and Harvard Universities.

RE STEDMAN SUMNER 305 College Ave.
Emeritus Professor of Economics and Sociology. 1897.
Controller, 1922-1941.
 A., Pomona College; B.A., Ph.D., Yale University.

PROFESSORS

ERWIN BABER 999 College Ave.
Professor of Sociology on the Henry Snyder Foundation, 1939.
 B., Campbell College; M.A., Ph.D., University of Wisconsin.

BAUMANN¹ 567 W. Eighth St.
Professor of German, 1931.
 Ph.D., University of Basel.

BENSON 1430 Via Zurita
Professor of Botany on the Henry Kirke White Bent Foundation, 1944.
 B., M.A., Ph.D., Stanford University.

A. BOND 234 W. Eighth St.
Professor of Economics on the Stedman-Sumner Foundation, 1948.
 B., M.A., Ph.D., University of Michigan.

DICK BRACHER 230 W. Seventh St.
Professor of English, 1944.
 B., Oregon State College; M.A., Ph.D., University of California.

CH'EN SHOU-YI

690 Indian Hill

Professor of Chinese Culture, 1941.

B.A., Lingnan University; Ph.D., University of Chicago; Fellow of the Asiatic Society.

JAMES WHITE CROWELL

450 University

Professor of Romance Languages, 1929.

B.S., M.A., Haverford College; Ph.D., Cornell University.

HAROLD DAVIS

612 W. Tenth

Professor of English on the Phebe Estelle Spalding Foundation, 1927.

B.A., Stanford University; B.A. and B.Litt., University of Oxford.

ROBERT SIDNEY ELLIS

1237 Dartmouth

Professor of Psychology, 1931.

B.A., University of Arkansas; Ph.D., Clark University.

KENNETH G. FISKE

585 W. Twelfth

Professor of Music, 1936.

B.Mus., M.Mus., American Conservatory of Music. Pupil of Leon Sametini, J. Gordon, Otokar Sevcik.

CHARLES A. FOWLER, JR.,⁸

256 E. Second

Professor of Physics on the Seeley W. Mudd Foundation, 1947.

B.A., M.S., University of Utah; Ph.D., University of California.

JOHN HOWES GLEASON

512 Baughman

Professor of History on the Warren Finney Day Memorial Foundation, 1939.

B.A., Ph.D., Harvard University; B.Litt., University of Oxford.

HUGH J. HAMILTON

1269-C Harvard

Professor of Mathematics, 1936.

B.A., University of California at Los Angeles; M.A., Ph.D., Brown University.

HUBERT HERRING

225 E. Eleventh

Professor of Latin American Civilization, 1945.

B.A., Oberlin College; M.A., Columbia University; Graduate, Union Theological Seminary.

FRANCIS RAYMOND IREDELL

1060 College

Professor of Philosophy on the Robert C. Denison Foundation, and Dean of Faculty, 1925.

B.A., Pomona College; M.A., Ph.D., Harvard University.

CHESTER GEORGE JAEGER

1045 Yale

Professor of Mathematics on the Joseph N. Fiske Foundation, 1931.

B.A., B.S., M.A., Ph.D., University of Missouri.

WILLIAM THOMAS JONES

4201 Via Pa

Professor of Philosophy, 1938.

B.A., Swarthmore College; B.Litt., University of Oxford; Ph.D., Princeton University.

JOHN HASKELL KEMBLE

Professor of History, 1936.

B.A., Stanford University; M.A., Ph.D., University of California.

The Faculty

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- FREDERICK LUDWIG MULHAUSER, JR. 424 W. Eleventh St.
Professor of English, 1941.
 B.A., College of Wooster; M.A., Ph.D., Yale University.
- VILLIS E. PEQUEGNAT 433 Harrison Ave.
Professor of Zoology on the Willard George Halstead Foundation, 1940.
 B.A., University of California; Ph.D., University of California at Los Angeles.
- LOIS SCHARDT 452 S. College Ave.
Visiting Professor of Art, 1950.
 Ph.D., University of Wuerzburg, Bavaria.
- ERNEST ALBERT STRATHMAN 160 W. Eleventh St.
Professor of English, 1932.
 B.A., M.A., Ph.D., Johns Hopkins University.
- ROBERT LOBINGIER STREHLE 1019 Dartmouth Ave.
Professor of Physical Education for Men, 1923.
 B.A., Pomona College; M.A., Claremont Graduate School; Graduate study, University of Southern California, University of California, Stanford University.
- JOHN ALBERT VIEG 435 W. Eighth St.
Professor of Government, 1945.
 B.A., St. Olaf College; M.A., University of Iowa; Ph.D., University of Chicago.
- ROBERT L. WADLINGTON, JR. 243 S. Mills Ave.
Professor of Military Science and Tactics, 1951.
 B.S., University of Tennessee; Lt. Colonel, Infantry, United States Army.
- VALTER TICKNOR WHITNEY 445 W. Tenth St.
Professor of Astronomy on the Frank P. Brackett Foundation and Director of the Observatory, 1929.
 B.S., M.S., Pomona College; Ph.D., University of Chicago.
- ALFRED OSWALD WOODFORD 443 W. Tenth St.
Professor of Geology, 1915.
 B.A., Pomona College; Ph.D., University of California.

ASSOCIATE PROFESSORS

- VERGINIA PRINCEHOUSE ALLEN 175 E. Twelfth St.
Associate Professor of Dramatics, 1930.
 B.A., Pomona College; Graduate study, Department of Drama, Yale University; M.A., Claremont Graduate School.
- VILLIAM G. BLANCHARD 1495 Via Zurita
Associate Professor of Music and College Organist, 1936.
 B.Mus., DePauw University; M.Mus., University of Michigan. Further study with Carl Weinrich and Hugh Porter in organ and with Seth Bingham in composition.
- LIZABETH CAWTHORNE 228 Harvard Ave.
Associate Professor of Physical Education for Women, 1935.
 B.A., M.A., University of California.

- DARYL DAYTON 262 W. Sixth St.
Associate Professor of Music, 1938.
 B.Mus., Oberlin College; Graduate study in Berlin and New York with Artur Schnabel.
 Leonard Shure, Dalies Frantz, and Guy Maier.
- EDWARD MONTGOMERY FRYER 231 W. Tenth St.
Associate Professor of Physics, 1946.
 B.A., Pomona College; M.E., Ph.D., Stanford University.
- CORWIN HERMAN HANSCH 129 E. Sixth St.
Associate Professor of Chemistry, 1946.
 B.S., University of Illinois; Ph.D., New York University.
- COLVIN HEATH 750 Indian Hill Blvd.
Associate Professor of Physical Education for Men, 1922.
 B.A., Pomona College; M.A., Stanford University.
- CHARLES SHIVELY HOLMES 1245 Dartmouth Ave.
Associate Professor of English, 1941.
 B.A., Oberlin College; Ph.D., Princeton University.
- GORDON CANFIELD LEE 1035 Columbia Ave.
Associate Professor of Education, 1948.
 B.A., University of California; M.A., Ph.D., Columbia University.
- LUTHER JAMES LEE, JR.¹ 443 W. Eleventh St.
Associate Professor of Government, 1941.
 B.A., Pomona College; M.A., Ph.D., University of California.
- MILES D. MCCARTHY 444 Harrison Ave.
Associate Professor of Zoology, 1946.
 B.S., West Chester State Teachers College; Ph.D., University of Pennsylvania.
- EARL JAY MERRITT 1865 E. Foothill, Glendora
Associate Professor of Physical Education, 1925.
 B.A., Pomona College; M.A., Claremont Graduate School.
- HENRY CORD MEYER 470 Harrison Ave.
Associate Professor of History, 1946.
 B.A., University of Colorado; M.A., University of Iowa; Ph.D., Yale University.
- LOUIS B. PERRY² 2929 Claremont Hts. Drive
Associate Professor of Economics, 1947.
 B.A., M.A., Ph.D., University of California at Los Angeles.
- EDWIN ALLEN PHILLIPS 146 E. Twelfth St.
Associate Professor of Botany, 1948.
 B.A., Colgate University; M.A., Ph.D., University of Michigan.
- WILLIAM F. RUSSELL 202 N. College Ave.
Associate Professor of Music, 1951.
 B.A., Columbia University; M.A., Harvard University; doctoral candidate, Harvard University.
- DWIGHT LEONARD RYERSON 107 E. San Jose
Associate Professor of Zoology, 1946.
 B.A., M.S., University of Arizona; Ph.D., University of California at Los Angeles.

The Faculty

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ALVIN HEWITT SCAFF³ 670 S. College Ave.
Associate Professor of Sociology, 1947.
 B.A., University of Texas; B.D., Chicago Theological Seminary; M.A., Ph.D., University of Texas.

JOHN SEWALL SHELTON 1100 Oxford Ave.
Associate Professor of Geology, 1946.
 B.A., Pomona College; Ph.D., Yale University.

W. NELSON SMITH 145 E. Sixth St.
Associate Professor of Chemistry, 1945.
 B.A., Pomona College; M.A., Ph.D., Stanford University.

JOHN ROBERT VON ROHR 1111 Harvard Ave.
Associate Professor of Religion, 1945.
 B.B.A., University of Minnesota; B.D., Chicago Theological Seminary; Ph.D., Yale University.

EMILIE ELIZABETH WAGNER 783 W. Tenth St.
Associate Professor of German, 1928.
 B.A., Smith College; M.A., Pennsylvania State College. Doctorat de l'Université mention Lettres, Toulouse.

EDWARD WEISMILLER³ 137 N. College Ave.
Associate Professor of English, 1949.
 B.A., Cornell College; M.A., Harvard University; D.Phil., University of Oxford.

ASSISTANT PROFESSORS

MOST U. AMREIN 346 Harvard Ave.
Assistant Professor of Zoology, 1951.
 B.A., M.A., Ph.D., University of California at Los Angeles.

THOMAS B. BELL² 417 E. Cucamonga Ave.
Assistant Professor of Physical Education for Men, 1947.
 B.A., M.A., University of California.

MARGERY SMITH BRIGGS² 420 Baughman Ave.
Assistant Professor of Music, 1943.
 B.Mus., B.Mus.Ed., M.Mus., Chicago Musical College.

KAREN BURT 14569 E. Teton Dr., Puente
Assistant Professor of Physical Education for Women, 1943.
 B.E., University of California at Los Angeles; M.A., University of Southern California.

HARRY JOSEPH CARROLL, JR. 916 Harvard Ave.
Assistant Professor of Classics, 1948.
 B.A., University of Akron; M.A., Ph.D., Harvard University.

EDWIN S. FUSSELL 686 Colorado St.
Assistant Professor of English, 1951.
 B.A., Pomona College; M.A., Ph.D., Harvard University.

JOEL GREENSPOON 1130 Harvard Ave.
Assistant Professor of Psychology, 1951.
 B.S., University of Virginia; M.A., University of Pennsylvania; Ph.D., Indiana University.

BURTON HENKE

153 E. Sixth

Assistant Professor of Physics, 1948.

B.A., Miami University; M.A. and Doctoral Candidate, California Institute Technology.

JOHN JAMES

Assistant Professor of Sociology, 1953.

B.S., University of Connecticut; M.A., Ph.D., University of Washington.

GRETCHEN GRAF JORDAN

638 E. Sixth

Assistant Professor of English, 1947.

B.A., M.A., Ohio State University; Ph.D., University of California at Los Angeles.

KARL GEORGE KOHN

135 E. Sixth

Assistant Professor of Music, 1950.

Studied piano in Vienna; Teacher's Certificate and Artist Diploma, New York College of Music; B.A., Harvard University. Advanced study in conducting with Julius Pruewer, theory and composition with Paul Hindemith, Walter Piston, and Randall Thompson.

VINCENT H. LEARNIHAN

220 W. Tenth

Assistant Professor of History, 1949.

B.A., M.A., Ph.D., University of California at Los Angeles.

ROBERT F. LEGGEWIE

240 Annapolis

Assistant Professor of Romance Languages, 1951.

B.S., Loyola University; M.A., University of Southern California; A.M., Ph.D., Harvard University.

RICHARD N. LOUCKS

135 E. Eighth

Assistant Professor of Music, 1948.

B.A., Pomona College; M.A. and Doctoral Candidate, Eastman School of Music.

JAMES G. MCCRAY

Assistant Professor of Military Science and Tactics, 1953.

B.S., United States Military Academy; Graduate, Infantry School, Fort Benning, Georgia; 1st Lieutenant, Infantry, United States Army.

LEE CAMERON McDONALD

121 W. Sixth

Assistant Professor of Government, 1952.

B.A., Pomona College; M.A., University of California at Los Angeles; doctoral candidate, Harvard University.

JOHN MOOI

353 W. Eleventh

Assistant Professor of Chemistry, 1953.

B.A., Hope College; Ph.D., Northwestern University

MARION SHOWS³*Assistant Professor of Religion, 1951.*

B.A., Occidental College; B.D., Union Theological Seminary; Ph.D., Columbia University

MAXINE J. SHURTZ

712 Yale Ave

Assistant Professor of Physical Education for Women, 1947.

B.S., Miami University; M.S., Wellesley College.

SEYMOUR SLIVE

119 N. College Ave

Assistant Professor of Art, 1951.

B.A., Ph.D., University of Chicago.

The Faculty

19

HERBERT B. SMITH 1021 Dartmouth Ave.
Assistant Professor of History, 1952.
B.A., M.A., University of Iowa; Ph.D., University of California.

FREDERICK SONTAG
Assistant Professor of Philosophy, 1952.
B.A., Stanford University; Ph.D., Yale University.

ELMER B. TOLSTED 337 W. Fifth St.
Assistant Professor of Mathematics, 1947.
B.S., M.S., University of Chicago; Ph.D., Brown University.

PETER K. WHITE 225 E. Eleventh St.
Assistant Professor of Military Science and Tactics, 1952.
B.A., Claremont Men's College; Captain, Infantry, United States Army.

INSTRUCTORS

FRANK C. CHILD Eli P. Clark Hall
Instructor in Economics, 1952.
B.A., University of Utah; M.A., and doctoral candidate, Stanford University.

JESSE CONE
Instructor in Physical Education for Men, 1953.
B.A., M.A., Stanford University.

WILLIAM L. FAUST 698 Colorado St.
Instructor in Psychology, 1953.
B.A., M.A., and doctoral candidate, Stanford University.

RAY FRAZER 638 E. Sixth St.
Instructor in English, 1952.
B.A., Pomona College; M.A., and doctoral candidate, University of California.

JAMES E. GRANT 676 W. Ninth St.
Instructor in Art, 1950.
B. E., M.F.A., University of Southern California; Student at Jepson Art Institute.

FREDERICK H. HAMMERSLEY 667 S. Rampart, Los Angeles
Visiting Instructor in Painting, 1953
B.A., University of Idaho; Student, Chouinard Art Institute, Ecole des Beaux Arts, Paris, Jepson Art Institute.

MARGOT JEAN 224 S. Doheny Dr., Beverly Hills
Visiting Instructor in Violoncello, 1946.
Pupil of Jacob at the Royal Conservatoire in Brussels.

GORDON K. KAUFMAN
Instructor in Religion, 1953.
B.A., Bethel College; M.A., Northwestern University; B.D. and doctoral candidate, Yale University.

JAMES W. KUHN
Instructor in Economics, 1953.
B.A., Harvard College; M.A. and doctoral candidate, Yale University.

ANN LINDSTAEDT

Instructor in French, 1953.

B.A., Wellesley College; M.A., University of Wisconsin; doctoral candidate, Northwestern University.

FRANCIS X. MAGGIPINTO

457 Cambridge D

Instructor in Spanish, 1952.

B.A., University of California at Los Angeles; M.A. and doctoral candidate, Stanford University.

EDWARD W. MALAN

118 Oakpark D

Instructor in Physical Education for Men, 1950.

B.A., Pomona College; M.A., Claremont Graduate School; Graduate Student, University of California at Los Angeles.

JACK C. MILLER

Rt. 1, Box 18, Upl

Instructor in Physics, 1952.

B.A., Pomona College; M.A., University of California; doctoral candidate, University of Oxford.

WILLIAM C. OLSON

Instructor in Government, 1953.

B.A., University of Denver; M.A. and doctoral candidate, Yale University.

ARLINE RUTH PETERSON

Instructor in Physical Education for Women, 1953.

B.S., New York University; M.S., Wellesley College.

GERHARD N. ROSTVOLD

448 Springfield

Instructor in Economics, 1952.

B.A., M.A., and doctoral candidate, Stanford University.

WOODROW WILSON SAYRE³*Instructor in Philosophy, 1948.*

B.A., Williams College; M.A., and Doctoral Candidate, Harvard University.

SALLY ANNE TAYLOR³*Instructor in Physical Education for Women, 1950.*

B.A., Pomona College; M.A., Stanford University.

LECTURERS

KOLMAN BLOCH

3914 Franklin Ave., Los Angeles

Visiting Lecturer in Music, 1953.

First clarinetist, Los Angeles Philharmonic Orchestra.

ERNST HEINRICH EIN

461 University Cir

Lecturer in Russian, 1950.

Graduate, Law School of Tartu University; D. J., Institute of Roman Law, Rome.

BERT GASSMAN

272 S. Doheny Dr., Beverly Hills

Visiting Lecturer in Music, 1952.

Oboist with the Los Angeles Philharmonic Orchestra.

CHARLES B. LAWLER

3560 Padua Av

Lecturer in Sculpture, 1949.

B.A., University of California. Studied under Charles Malfroy in Paris, California; School of Fine Arts, San Francisco, and Alexander Archipenko.

The Faculty

21

DOROTHY REMSEN

Visiting Lecturer in Music, 1953.

Harpist, Los Angeles Philharmonic Orchestra.

137 N. Serrano, Los Angeles

HELEN M. SMITH

Lecturer in Music, 1949.

B.A., Pomona College.

120 W. Third St.

ROGER STEVENS

Visiting Lecturer in Music, 1953.

Flutist, Los Angeles Philharmonic Orchestra.

S. Melton, Pasadena

GEORGE H. TYLER

Visiting Lecturer in Music, 1952.

Formerly first trumpet with Los Angeles Philharmonic Orchestra.

140 E. Twelfth St.

MEMBER OF THE CLAREMONT GRADUATE SCHOOL FACULTY OFFERING COURSES IN POMONA COLLEGE

PAUL HAROLD KOCHER

Professor of English, Claremont Graduate School.

B.A., Columbia University; M.A., J.D., Ph.D., Stanford University.

¹Absent on leave, first semester, 1953-54.

²Absent on leave, second semester, 1953-54.

³Absent on leave 1953-54.

FACULTY COMMITTEES 1953-1954

First person named is the Committee Chairman

Administration—President, Dean of the Faculty, Sanders, Gleason, McCarthy, Bracher, Benson, Gordon Lee.

Admission—Sanders, Beatty, Crowell, Maple, Herbert Smith, Walton, Wheaton.

Athletic Council—Strehle, Jaeger, Phillips, three student representatives, and two alumni representatives.

Pomona College representatives on the Southern California Intercollegiate Athletic Conference—Jaeger, Strehle.

Classification—Maple, Carroll, Hamilton, Gordon Lee, Ryerson.

Courses of Study—Iredell, Bond, Ch'en, Fryer, Gleason, Hansch, Holmes, Jordan, Kemble, Maple, Pequegnat, Sanders, Slive, Strathmann, Vieg, Walton.

English—Jordan, Fussell, Hamilton, Henke, Learnihan, Gordon Lee.

Library—Gleason, Allen, Benson, Ch'en, Davies, Fussell, Nelson Smith, Woodford.

Personnel—Maple, Amrein, Beatty, Faust, Nider, Phillips, Shurtz, Walton, and four student representatives selected by the Executive Council of the Associated Students.

Pre-Law—Luther Lee, Bracher, Kemble, Rostvold.

Pre-Medical—Pequegnat, Beatty, Coltrin, Hansch, Henke, Leggewie, Ryerson, Vieg.

Public Events—Iredell, Meyer, Russell, Nelson Smith, Vieg, Walton, and three student representatives selected by the Executive Council of the Associated Students.

Religious Activities—von Rohr, Beatty, Kaufman, Malan, McDonald, Mill, Mooi, Rankin, Shelton, Herbert Smith, Sontag, Walton, two representatives of Christian Association.

Scholarships and Student Aid—Walton, Baber, Beatty, Bracher, Malan, Meyer, Sanders, Nelson Smith, Wheaton.

Student Affairs—Sanders, Beatty, Child, McCarthy, Mulhauser, Russell, Sontag, Walton, and four members of the Executive Council of the Associated Students.

Vocational Counselling and Placement—Beatty, Bell, Cawthorne, Ellis, Kohl, Leggewie, Gordon Lee, Olson, Rostvold, Wheaton, and student members appointed by Associated Men Students and Associated Women Students.

The College

POMONA COLLEGE is an independent, privately endowed, coeducational institution of arts and sciences. Originally established in 1887 to serve its immediate region, the college now enjoys support from every section of the United States. Enrollment is restricted to approximately one thousand students, divided equally among the four classes.

The purpose of the College is the training of men and women for leadership among a freedom-loving people. Through this means, Pomona seeks to perpetuate the ideals of the society of which it is a part.

The College owes its inception to early settlers in Southern California whose previous affiliations led them to the founding of a "Christian College of the New England type." Under the leadership of the Reverend Charles B. Sumner, a devoted and self-sacrificing group were appointed members of the first Board of Trustees by the General Association of Congregational Churches of Southern California. The original trustees were: Henry K. W. Bent, Nathan W. Blanchard, Anson Brunson, Elwood Cooper, James T. Ford, James H. Harwood, Dexter D. Hill, Theodore C. Hunt, George W. Marston, John K. McLean, Henry A. Palmer, Seth Richards, Charles B. Sheldon, Charles B. Sumner, and Andrew J. Wells. These Christian pioneers, deeply committed to religious, political, and economic freedom, founded a college dedicated to the pursuit of truth and knowledge—principles to which it has ever remained steadfast.

With the freedom characteristic of Congregational organization, the College soon made itself the servant of a wider Christian fellowship. Today the Board of Trustees is a self-perpetuating body, free from ecclesiastical control but pledged under its charter to maintain the institution as truly Christian, though nonsectarian. Conscious of its heritage, the College gives every encouragement to both the study and practice of religion by its students. Within the curriculum the department of religion offers general courses designed for all students, and more specialized work for those desiring to concentrate in religion. Church and chapel services and the work of the Christian Association emphasize the place of religious thought and activity in the life of the campus.

The College was incorporated October 14, 1887, and instruction

was begun in September, 1888, in a small rented house in the city of Pomona. The following January an unfinished hotel in Claremont (now Sumner Hall), together with considerable land adjacent, was given to the College and the work was transferred to that place. Although this location was originally regarded as temporary, Claremont later became the permanent home of the College. By that time, however, the name of "Pomona College" had become so definitely fixed to the institution that it was retained notwithstanding the location.

The College met a need for higher education in Southern California, and after the initial years its growth was constant. The first class was graduated in 1894, at which time the total number of college students was forty-seven. The preparatory department, essential in the beginning, was discontinued in 1910.

Pomona is a liberal arts college, which affords a full academic program in the social sciences, the natural sciences, and the humanities. The curriculum is planned to give a comprehensive understanding of society rather than technical training in highly specialized fields. The College believes that the best preparation for life is liberal education, and it aspires thus to train men and women for professional, business, and civic leadership.

From its foundation the College has emphasized the highest standards of scholarship, both in its program and in the selection of its students. Pomona's devotion to scholarship received national recognition as early as 1914, when the College was awarded a chapter of Phi Beta Kappa. Since 1924 the College has given further impetus to academic achievement by offering an honor type of instruction which affords opportunities for independent study to outstanding students.

Many distinctions have come to the college through the achievement of its alumni. The college ranks high in the percentage of its graduates listed in *Who's Who in America*, and in *American Men of Science*. In the latest survey, Pomona was one of the five leading liberal arts colleges in the nation in the number of graduates listed in the National Academy of Sciences. Many honors have been won by the faculty, among them a number of Guggenheim Fellowships, Fulbright Fellowships, and fellowships from the Fund for the Advancement of Education.

The College recognizes that a primary requisite in the promotion of high scholarship is the intimate contact of students and

faculty. Pomona maintains a large faculty in relation to its student body and constantly seeks to promote close relations between students and instructors. During 1953-54 the college will have a faculty member for every ten students enrolled. Elementary courses are divided into sections small enough to provide opportunity for discussion. In their upper division courses students have abundant opportunity for individual attention.

Pomona believes that the highest values of a liberal education can be attained best in a residence college. Through the efforts of its Trustees the College now possesses one of the finest groups of dormitories and dining halls to be found in the country. Approximately 800 students can be accommodated in the dormitories, and all students except the small group staying at home take their meals in the college dining halls.

Pomona College is the product of the individual initiative of America. It is an example of private enterprise at work for the public good. The College owes the development of the campus and the growth of its financial resources to the generosity of patrons, friends, and alumni. As an independent institution, without assistance from any governmental or church body, Pomona must rely upon gifts for the expansion of its program and for the increase of its endowment, upon which depends the financial strength of the college. From the contributions of her benefactors the total assets of Pomona now surpass \$13,000,000, of which approximately \$6,400,000 is in endowment.

THE ASSOCIATED COLLEGES

Pomona College is the original institution in a group of four Associated Colleges, of which the other members are Claremont College, Scripps College, and the Claremont Men's College. Although each college is autonomous and independently controlled by its own Board of Trustees, the four institutions cooperate in their academic programs and in use of certain common facilities.

The group, which represents a combination of English and American practices, arose from the desire of Pomona College to maintain for itself the advantages of a small college and at the same time to provide at Claremont an educational opportunity for the increasing numbers of young men and women who at the end of World War I were seeking admission to the College.

Under the leadership of the Pomona trustees, the institution now

incorporated as Claremont College was established on October 1, 1925, for the inauguration of the new plan. It assumed responsibility of acting as a central coordinating agency, the direction of graduate instruction for the Associated Colleges, and the foundation of new institutions as they might be required. Claremont College conducts its instructional program under the name of "The Claremont Graduate School," and the presidents of the undergraduate colleges, in addition to their duties in their respective colleges, serve in rotation for two year terms as head of Claremont College with the title of Provost. In addition to its own appointees the faculty of the Claremont Graduate School includes most members of the three undergraduate faculties.

An early objective of the group plan was the establishment of a college for women. In September, 1927, Scripps College, named in honor of Miss Ellen Browning Scripps, whose generosity and vision made it possible, was opened as a residence college for 225 women. From the beginning the main feature of its curriculum has been a unified sequence of courses in the humanities.

Claremont Men's College, the third undergraduate institution, was established in 1946 as a liberal arts college training particularly for business and public administration. The College is developing residence and academic facilities for approximately 300 students.

The four colleges cooperate in their academic programs and thus afford for their students many of the advantages of a university center. The undergraduate colleges open their classes without tuition charges to students in the other undergraduate institutions. Selected courses in the Claremont Graduate School are open to seniors at Pomona, Scripps, and Claremont Men's College.

The colleges maintain a common business office and a joint health service which includes the full time services of a physician and the operation of a thoroughly up-to-date infirmary. A joint library service purchases and catalogues books for the three libraries. The Bridges Auditorium, which seats 2600, is administered by Claremont College for the group.

CLAREMONT

One of Pomona's greatest assets is the town of Claremont, a community of 7,000 that has grown up around the college. The early settlers were New Englanders and they gave to Claremont an atmosphere unusual on the Pacific Coast.

With the growth of Pomona and the foundation of the other associated colleges the village has come to be a cultural center of unusual significance. Three private preparatory schools are now located in Claremont. Under the auspices of the Congregational Church, Pilgrim Place, a community for retired ministers and missionaries, was founded in 1915. Each winter the village entertains a number of visitors who come to enjoy the climate and the beauty of citrus groves beneath towering, snow-capped mountains.

Although Pomona College students enjoy in Claremont the charm and intimacy of a New England village, they are in no sense isolated from the life of Southern California, for the college is only four miles from Pomona, a city of over 35,000 inhabitants, and thirty-five miles from Los Angeles, with which it has hourly bus connections. Claremont is on the main line of the Santa Fe Railway, and the transcontinental lines of the Union Pacific and the Southern Pacific pass through the city of Pomona.

The Campus

POMONA COLLEGE occupies about one hundred and twenty acres of which sixty are included in Blanchard Park, the gift of Nathan W. Blanchard, about ten in Alumni Athletic Field and fifty in the campus proper. The College centers on Marston Quadrangle, built and endowed by George W. Marston, 1850-1941, distinguished citizen of San Diego, an original trustee of Pomona and for many years president of the board.

The twenty-six buildings on the campus are heated from central plant which serves the four colleges.

ADMINISTRATIVE AND GENERAL ACADEMIC BUILDINGS

Mary L. Sumner Hall, a hotel which in 1889 became the original building of the college, was removed from its first site in 1922, remodeled for administrative and faculty uses, and named in memory of the wife of Rev. Charles B. Sumner, LL.D., one of the Founders of Pomona College.

Holmes Hall, the first academic building erected by the college in 1893, is a memorial to Cyrus W. Holmes, Jr., of Monson, Massachusetts. Reconstructed in 1916 in conformity with modern plans for buildings and campus, it is now devoted to recitation rooms, departmental offices, and an auditorium seating 750.

The Andrew Carnegie Building, a gift of Mr. Carnegie, which served as the College Library from its construction in 1908 to June 1952, was remodeled in 1952, for use as a classroom and office building for the Social Sciences.

The Associated Colleges maintain a joint Business Office in Harper Hall, constructed in 1931.

ART AND MUSIC BUILDINGS

Rembrandt Hall, built in 1914, is devoted to the Department of Art. The upper floor contains studio and work rooms; the lower floor two galleries, one of which was added in 1937.

The Mabel Shaw Bridges Hall of Music, given by Mr. and Mrs. Appleton S. Bridges of San Diego in 1915, in memory of

their daughter who died while a student at Pomona College, offers excellent facilities for the study of music. It contains, in addition to private studios, an unusually beautiful auditorium seating 800. The Mabel Shaw Bridges Auditorium, also the gift of Mr. and Mrs. Appleton S. Bridges in memory of their daughter, was constructed in 1931. It has a seating capacity of 2600, and is administered by Claremont College on behalf of the Associated Colleges. The Open-Air Theatre, built in 1910, takes advantage of the natural beauty of Blanchard Park.

SCIENCE BUILDINGS

Pearsons Hall of Science, the gift of Dr. D. K. Pearsons in 1898, contains the laboratories and lecture rooms of the Departments of Physics and Mathematics.

The Frank P. Brackett Observatory, the gift of Mr. Llewellyn Pixby, '01, has served the Department of Astronomy since 1908.

The Seaver Laboratory, a separate building in the Observatory area, was completed in 1950. The dome houses the Clara Whitney Hatto Reflector Telescope, and the main floor contains classrooms and a library.

Harwood Hall, given in 1915 by Mr. A. P. Harwood, contains lecture rooms and laboratories for the use of the Department of Psychology.

The Mason Hall of Chemistry, the gift of Mr. W. S. Mason, in 1922, provides ample facilities for the study of Chemistry, and also houses the Department of Geology.

The Crookshank Hall of Zoology, given in 1922 by Dr. D. C. Crookshank, is occupied by the Departments of Botany and Zoology.

HONNOLD LIBRARY

The new Honnold Library, which was given by Mr. and Mrs. William L. Honnold to Claremont College for the Associated Colleges, will house the Pomona College Library along with the libraries of Claremont Men's College, the Claremont Graduate School, and a part of the Scripps College Library. With the opening of this splendid building in the autumn of 1952, Pomona and the other Associated Colleges will enjoy one of the finest libraries in the West.

PHYSICAL EDUCATION AND ATHLETIC FACILITIES

The War Memorial Gymnasium, given to the college by students, alumni, trustees, and friends, commemorates the men and women of Pomona College who gave their lives in World War I and World War II. Completed in December, 1950, the Memorial Gymnasium is one of the finest and most beautiful college gymnasiums in the country. The building includes an excellent basketball court with seats for 1200 spectators, a classroom, a memorial library, staff offices, and commodious shower and locker rooms.

The Memorial Training Quarters, constructed in 1922 as a memorial to the men of Pomona College who lost their lives in World War I, has been incorporated as the east wing of the new Memorial Gymnasium. It represents the gift of the parents of one of these men, Sheldon Gerry, '17, supplemented by the gifts of alumni, students, and friends. Among other facilities the Training Quarters contain dressing rooms for swimming for both men and women, and the freshman locker rooms.

A swimming pool, of the standard size for water polo, and fully equipped with modern appliances, is open to both men and women for instruction and recreation throughout the year.

Alumni Field, consisting of about ten acres, has been developed by the alumni into athletic grounds admirably equipped and unsurpassed in the Southwest in beauty of setting. First-class tennis courts, an excellent track, baseball and football fields, also hockey and basketball courts are within the limits of the campus. A beautiful ticket booth, wall and gate to Alumni Field were built in the autumn of 1950, as a gift of the class of 1916.

The William Renwick Gymnasium, named in memory of an early donor to the college, was first erected as a military barracks in World War I. It provides general facilities for the women's department of physical education.

RESIDENCE AND DINING HALLS FOR MEN

Helen R. Walker Hall, the gift of Helen R. Walker of Glendale, California, will be opened for use in September, 1953. Its rooms grouped around three courtyards, will accommodate 105 men. At the east, Walker Hall also includes a lounge and reception room for the entire men's campus.

The Eli P. Clark residence unit for men, erected in 1919, includes three dormitories with accommodations for 290 students.

The Albert K. Smiley Hall, the first dormitory for men, built in 1908, accommodates seventy-two students and one instructor.

Accommodations for married men may be had in apartments originally given to the college by the United States government for use of veterans.

Frary Dining Hall for Men, given by Mr. George W. Marston in 1929 in memory of Rev. Lucien H. Frary, a Trustee from 1892 to 1903, seats 375 in the main hall and includes three smaller dining rooms for special uses.

RESIDENCE AND DINING HALLS FOR WOMEN

Harwood Court, constructed in 1921 and named in memory of Mrs. Charles E. Harwood, and which also includes Strong Hall, accommodates 180 women.

Florence Carrier Blaisdell Hall, erected in 1936 and named in honor of Mrs. James A. Blaisdell, wife of the fourth President of the College, houses 120 women.

Della Mulock Mudd Hall, which honors the wife of the late Beeley W. Mudd, a Trustee of Pomona, was completed in the spring of 1947. The building has accommodations for 100 women, most of them in single rooms.

The College also maintains three houses, Baldwin House, Brackett House, and Kenyon House, as residences for women.

Beautiful and commodious dining facilities are available for all women students. Residents of Harwood Court are served by the Aurelia Squier Harwood Memorial Dining Hall built in 1931.

The Mary McLean Olney Dining Hall, constructed in 1936, has accommodations for 120 students.

Jessie E. Gibson Dining Hall, built in 1949 in honor of the former Dean of Women, serves the students living in Blaisdell Hall and Mudd Hall.

EDMUNDS UNION

The Charles K. Edmunds and Katharine P. Edmunds Student Union, which honors the late fifth President of the College and his wife, provides a social center for all students and an attractive allroom in which all formal dances are held. This building, made possible by the gifts of many parents supplemented by funds from the Associated Students and the bequest of the late Florence Wiley, was built in 1937 and houses student offices, including pub-

lications, the graduate manager's office, and the Cooperative Store.

A new east wing to Edmunds Union, which houses the fountain and sandwich facilities, and also includes a full basement for recreational use, was completed in January, 1951.

HEALTH FACILITIES

Memorial Infirmary, given in 1931 in memory of Colonel Seeley W. Mudd, is administered by Claremont College and is operated jointly for the benefit of students in all the Associated Colleges at Claremont. Twenty-four beds are available. The Infirmary is situated on Amherst Avenue, north of Foothill Boulevard.

The Baxter Medical Building, the gift of Doctor and Mrs. George E. Baxter to Claremont College, serves the students of the Associated Colleges. It provides an office where the College Physician and nurse are available for daily consultation and treatment for minor ailments.

OTHER FACILITIES

The President's House at 345 North College Avenue was the gift of Dr. D. K. Pearsons. It was constructed in 1897, and has been the home of all Presidents of the College since that time.

A replica of the original house in Pomona in which the College first opened in September, 1888, was erected on the campus in 1937 through the generosity of an anonymous donor. It contains the historical exhibit set up in recognition of the College's Fiftieth Anniversary, and will become ultimately a museum of Pomonian history.

The College operates its own independent deep well water supply, the gift of Edward P. and Mary G. Bosbyshell.

THE CLAREMONT INN

The Claremont Inn, beautifully located on College Avenue opposite the campus since 1906, is the guest house of the colleges and community, and is owned by Pomona College. Parents and friends are invited to use the facilities of the Inn for longer or shorter periods during visits to Claremont. Public and private dining rooms and accommodations for sixty guests under both the American and European plans are provided. Students who do not return home during vacation periods find the Inn a convenient vacation home. The hospitality of the Inn expresses the friendliness of the colleges and the community.



The Laboratory Houses the Reflector Telescope



Garden of Harvard Court - Residence Hall for Women

Admission

STUDENTS ARE ADMITTED to Pomona College upon evidence which satisfies the Committee on Admissions that: (1) the applicant possesses the necessary preparation and ability to carry successfully the academic program offered here, and will actually use them to that end; (2) the College, with its program and traditions, and the applicant, with his capacities, interests and needs, are mutually well suited to each other.

The Committee tends to judge the fitness of an applicant in terms of reasonably definite academic prerequisites but it makes every effort to form judgments on the basis of the total picture rather than in terms of narrowly technical requirements.

Any person interested in preparing for Pomona, or any school official who is responsible for directing the preparatory programs of students is invited to call on the Dean of Admissions at any time regarding the acceptability of candidates or for advice on specific programs.

For further information, write to Office of Admissions, Sumner Hall, Pomona College, Claremont, California.

ADMISSION TO FRESHMAN STANDING

The College does not require any particular pattern of secondary school courses, but assumes candidates will have taken a college preparatory course. Under ordinary circumstances they are advised to complete at least three years of satisfactory study in English. Two years of mathematics are advised for all candidates. Those who plan to study mathematics or the physical sciences in college should have at least three years or more, including trigonometry. (See page 3.) Foreign language credit is not required for admission but for concentration in many fields a reading knowledge of at least one foreign language is essential. It is much to the advantage of a student to begin the acquisition of this knowledge before entering college and this is strongly advised. Two or three years in social studies and two or three in sciences are also advised. The major attention is given to the quality of preparation rather than to the exact arrangement of subjects.

It is normally assumed that candidates will have received a high school diploma. Students from foreign countries or those who are

following unusual patterns of preparation may submit other evidences of their readiness to undertake college work.

All freshman candidates are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board. (See page 37 for further information.) This requirement does not lessen the importance of the school record, the personal ratings and personal interviews. The test results will be used in the academic advising of freshmen and replace some of the aptitude tests previously given during the registration period.

It is recommended that applications be filed at the beginning of the senior year in high school. The Scholastic Aptitude Test should be taken either in January or in March and the candidate is responsible for registering for this with the College Entrance Board. The regular selection of new students will be made from applications received on or before March 15, provided candidates have taken the Scholastic Aptitude Test in March or earlier.

Applications will be accepted between the dates of March 15 and August 15 from candidates who have already taken the Scholastic Aptitude Test or who plan to take it on May 16 or August 12 but there is no assurance that there will still be vacancies at that time. These applications will be acted upon as promptly as possible.

Since there are more applicants than can be accepted, the Committee attempts to select the strongest candidates with little regard to the chronological order in which applications are received. In all cases admission is granted subject to evidence of satisfactory physical condition on the part of the candidate.

ADMISSION TO ADVANCED STANDING

In considering applications for advanced standing the College follows the general policy used for freshman candidates. It requires honorable dismissal from the previously attended institution with an average grade of C or better in liberal arts type of courses taken in accredited collegiate institutions, together with recommendation from the proper college officials. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. The transcripts must show the detailed record in all secondary as well as all collegiate institutions attended.

Credit allowed for work taken in other institutions will be determined by the Classification Committee after the candidate has been accepted.

ADMISSION TO SPECIAL CLASSIFICATION

Mature students, particularly those equipped for advanced studies may be admitted as special students to courses for which, by ability and preparation, they may be fitted. Special students are not candidates for a degree, though students admitted to this classification may be accepted later as candidates for a degree.

THREE YEAR PROGRAM FOR JUNIOR COLLEGE GRADUATES

To enable junior college graduates and others who enter with advanced standing to continue their education on the basis of a three-year program leading to the Master's degree as well as to the Bachelor's degree, Pomona College and the Claremont Graduate School have planned their offerings so that the closest articulation of undergraduate and graduate study is possible.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Along with several other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from Massachusetts Institute of Technology after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona. For detailed program see page 84.

APPLICATION PROCEDURE

Application for admission to Pomona College must be made on the form furnished by the college and all credentials must be filed with the Committee on Admissions. The forms and credentials required are:

1. *Application Form I.* Including \$5.00 fee, which is not refundable. Make checks or money orders payable to Pomona College.
2. *Two Personal Rating Scales, Form II.* Confidential reports by the principal or other school official, and by a class-room teacher, sent by them to the Committee on Admissions.
3. *A Statement of Qualifications.* The Committee seeks the most complete possible picture of each candidate and to this end requires a personal, autobiographical statement to supplement the other information. Some or all of the following points

may be discussed although the candidate need not consider this an outline to be followed: (1) your preparation or background for college other than that which will be evident from your school record; (2) your major aptitudes and interests either of an academic or non-academic nature; (3) your purposes in going to college; (4) your particular reasons for choosing Pomona College. It is permissible to discuss the paper with others but the writing, both as to ideas and the form in which they are expressed, must be the candidate's. The letter may be typed. The length should not exceed 1,000 words.

4. *Official Transcript* of high school record to date. At the time of selection of candidates, work in progress will be considered in fulfillment of requirements, and admission will be granted subject to the filing of a final transcript showing the satisfactory completion of all secondary school work. The transcript form ordinarily used by the school is satisfactory. It should include an interpretation of the grading system. It should not be sent until the first half of the senior year has been completed.

(In addition to the above, the Scholastic Aptitude test of the College Entrance Examination Board must be taken.)

5. *Medical Certificate*, signed by a licensed M.D., on a form furnished by the college after admission has been granted provisionally. The college reserves the right to reject students for health reasons.
6. *Room Deposit* of \$50 due within thirty days of date of acceptance. This deposit will be held until the student's final semester, at which time it will be credited on the semester fees. No refund of the room deposit will be made if a student withdraws before entrance.

Failure to make this payment results in the cancelling of admission. Candidates on the alternate list for whom places are not provided will have the entire deposit refunded.

In addition to the procedure noted above, a candidate for admission to advanced standing must file an official transcript, or transcripts, of all college work for which he has been previously registered and a statement of honorable dismissal from the institution last attended.

SCHOLASTIC APTITUDE TEST

All candidates for admission to freshman standing are required to take the Scholastic Aptitude Test administered by the College Entrance Examination Board and are held responsible for making application to the Board. Advanced standing applicants may also be required to take an entrance examination, and if so they will be notified individually. Students who plan to enter in September are advised to take the test in December, January or March. Students who plan to enter in February should take it in May, August or December. Either of the three dates is equally satisfactory.

The College Entrance Examination Board will hold five complete series of examinations for 1953-54. Application to take an examination must be filed three weeks in advance of the examination date. The schedule for the examinations with the dates of registration is as follows:

<i>Examination Date</i>	<i>Regular Registration Closes</i>	<i>Late Registration Closes</i>
December 5, 1953	November 4, 1953	November 28, 1953
January 10, 1954	December 19, 1953	January 2, 1954
March 13, 1954	February 20, 1954	March 6, 1954
May 22, 1954	May 1, 1954	May 15, 1954
August 11, 1954	July 21, 1954	August 4, 1954

Applicants are required to take the Scholastic Aptitude Test only for admission to Pomona College. It is not necessary to take the Achievement Tests.

Copies of the Bulletin of Information may be obtained without charge from the College Entrance Examination Board. The Bulletin contains rules regarding applications, fees and reports; rules for the conduct of the tests; advice to candidates; descriptions of the tests; sample questions; and lists of examination centers.

Candidates should make application by mail to the College Entrance Examination Board. Students who wish to take the examinations in any one of the following western states, territories, and Pacific areas: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Alaska, Hawaii, Australia, and all Pacific islands including Formosa and Japan, should address their inquiries and send their applications to College Entrance Examination Board, P. O. Box 9896, Los Feliz Station, Los Angeles 27, California.

All others should write to College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey.

Application forms will be sent to any teacher or candidate upon request. When ordering the forms candidates must state whether they wish applications for the December, January, March, May or August tests. Application forms for the December tests will be available early in the fall; those for the January tests will be ready for distribution about November 24; those for the March series, January 3; forms for the other two series will be available immediately after the preceding series has been held. A copy of the Bulletin of Information is sent to every candidate requesting an application blank.

Each application to the College Entrance Board should be accompanied by the examination fee of \$6.00.

Candidates are urged to send in their applications and fees to the College Entrance Board at least several weeks before the closing date, since early registration allows time to clear up possible irregularities which might otherwise delay the issue of reports. Under no circumstances will an application be accepted if it is received at the Board office later than one week prior to the date of the examination. No candidate will be permitted to register with the supervisor of an examination center at any time. Only properly registered candidates, holding tickets of admission to the centers at which they present themselves, will be admitted to the tests. Requests for transfer of examination center cannot be considered unless these reach the Board office one week prior to the date of the examination or earlier.

The Board will report the results of the tests to the institutions indicated on the candidates' applications. The colleges will, in turn, notify the candidates of the action taken upon their applications for admission. Candidates will not receive reports upon their tests from the Board.

The College Transfer Test is required of all applicants for Junior College Transfer Scholarships and for such other applicants for advanced standing who may be notified individually by the Admissions Office. It is given at the same times and places as the Scholastic Aptitude Test, according to the schedule on the previous page. Requests for application blanks for the test should be sent to the College Entrance Examination Board at one of the two addresses given above. The fee for the test is \$6.00, with an additional \$3.00 for late registration.

Expenses

TOTAL PAYMENTS by students cover only approximately 61% of the cost of operating the college. Admission to Pomona in itself, therefore, confers upon each student, in addition to any special awards he may win, an annual scholarship of approximately \$478. This sum is provided by gifts from those interested in furthering the high purpose of the college, by income from endowment and other sources.

The rising costs of education have greatly increased the average amount spent on each student. The College reserves the right to change any of the following fees at any time should conditions make it necessary.

General Fees

TUITION, including health service, season tickets for Artist Course and Athletic Events	per semester	\$350.00
ASSOCIATED STUDENT DUES	per semester	10.00
GRADUATION FEE		10.00

Residence Fees

ROOM AND BOARD	per semester	\$362.50
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(For men living in Smiley Hall the charge is \$322.50 per semester. In Clark Hall a few rooms with fireplaces are available for men, for which the charge is \$385.50 per semester. Smiley Hall is not open to freshmen.)

ROOM DEPOSIT, applicable on payment of bills for final semester of residence. (See pages 36, 41.)	50.00
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RESIDENTIAL BREAKAGE DEPOSIT, held until a student withdraws from college. (See page 41.)	10.00
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Departmental Fees

For exact fees in science and music see Courses of Instruction.

LABORATORY FEES	\$ 2.00 to 10.00
LABORATORY BREAKAGE DEPOSITS	4.00 to 10.00
FEES FOR APPLIED MUSIC	25.00 to 60.00
PRACTICE FEES, APPLIED MUSIC	2.50 to 15.00

Fees for Special Privileges

LATE REGISTRATION (See page 75.)	\$2.00 to 10.00
CHANGE OF PROGRAM (See page 75.)	3.00
SPECIAL EXAMINATIONS	2.00
CAMPUS FEE FOR AUTOMOBILES (See page 65.)	2.00 to 4.00

Fees for Part-time Students

SPECIAL TUITION FOR STUDENTS CARRYING LESS THAN TEN UNITS OF WORK	per unit \$35.00
AUDITOR'S FEE	per course \$10.00

RESIDENCE FOR MEN

The College is equipped with residence and dining hall facilities to accommodate most men students. It is expected, and the College may require, that men not actually living at home will room and dine in college halls. All freshmen are required to room on campus unless, for special reasons, they are authorized at the time of admission to room at home or near the campus. Students living at home or working for board or room may make special arrangements with the Dean of Men.

Residential campus privileges are provided only on the basis of an inclusive charge varying according to location of room and including board. The standard charge in Clark and Walker Halls is \$362.50 per semester, but a few rooms with fireplaces are available at \$385.50. The price for rooms in Smiley Hall is \$322.50 per semester. Smiley Hall is open only to upperclassmen. These charges include necessary furniture, rugs, bed linen and towels, the laundering of the same and the care of rooms. Linens will be changed and beds made in all halls once a week. On the remaining days men will make their own beds. The only articles to be furnished by the students are blankets, spreads for single beds, and study lamps.

Off-campus housing arrangements for unmarried students must be approved in advance by the college. The Office of Dean of Men maintains a list of approved residences, with description of accommodations available, rates, and similar information.

For married students there are a few Veterans Unit apartments available on a modest rental basis, furnished or unfurnished. For further information the married student should correspond with the Admissions Office after or at the time of formal admission. Assignments are made in the Office of the Dean of Men.

RESIDENCE FOR WOMEN

Women students are expected to room in residence halls and board at college dining rooms. Freshmen are required to reside in Harwood Court. Students living at home or working for room or board may make special arrangements with the Dean of Women.

Harwood Court and the three College Houses have both single and double rooms, as well as suites. Except for a few double rooms, single accommodations are provided in Blaisdell Hall and Mudd Hall. Each room is adequately furnished; the only articles to be provided by the student are linen, blankets, and spread for single bed. Residential campus privileges are provided on the basis of an inclusive charge of \$362.50 per semester.

RESIDENCE REGULATIONS

The residence privilege does not include the use of rooms during vacation periods. The residence halls are open for new students the Friday before the opening of the college year and for returning students the day of registration. The residence and boarding privileges end 24 hours after the last examination at the end of each semester for all students except seniors and those asked by the college to remain through Commencement. The residence and dining halls are closed the day after Commencement.

Each student is required to make a deposit of \$50 for a room in the dormitory. This deposit is held by the college until the student's final semester in residence, when it is applied on his college bills for that semester. The deposit will be refunded if notice of withdrawal is given not less than sixty days before the opening of the term for which the student is withdrawing.

A residential breakage fee of \$10 is required from each student, from which deductions are made for individual and communal damage to college property, any balance being credited to the student's account on graduation or withdrawal.

The College reserves the right to dismiss from a residence hall without rebate of room rent any student who becomes an undesirable occupant.

The College may dispose of any articles left by students for more than six months.

BILLS

All college bills are due each semester in advance and must be paid by the student at the time of registration. Students wishing to arrange for payment by installments should confer with the Bursar before entering, preferably in the summer preceding registration.

A service charge for deferment will be made as follows:

First semester

Balance payable on or before November 1	\$1.50
Balance payable one-half November 1 and one-half December 1	2.25
Balance payable one-third November 1, one-third December 1, and one-third January 1	3.00

Second semester

Balance payable on or before March 1	1.50
Balance payable one-half March 1, one-half April 1	2.25
Balance payable one-third March 1, one-third April 1, and one-third May 1	3.00

It is expected that payment of installments will be made on or before due dates; failure to do so without the approval of the Bursar will result in an additional service charge.

No refunds are made to those leaving before the end of the semester except that in the case of those leaving before the middle of the semester because of illness one-half of the tuition and laboratory fees are refunded and in the case of those dropping out for good cause within a week of their registration all but \$25.00 is returned. No refund is made on a room payment unless the room is re-rented to someone not then rooming in a college residence hall.

Students with unpaid bills are not given honorable dismissal or graduated. Seniors must settle all college bills and library obligations by four p.m. of the fourth day preceding Commencement if they are to receive their diplomas with their class.

Scholarships and Student Aid

THE COLLEGE offers an extensive scholarship and student aid program, and approximately \$112,000 will be available to Pomona students for scholarships, fellowships, grants-in-aid, and prizes during 1953-54. These funds are derived from endowments for scholarships and student aid, from individual donations, from the annual Alumni Fund, and from the general college budget.

Scholarships are awarded to students who achieve outstanding academic records and who need financial assistance to attend college. In making awards the Committee on Scholarships considers the candidate's promise in literary, scientific, or other scholastic ability, qualities of manhood or womanhood, force of character, power to lead and to take an interest in the college community, and physical vigor as shown by interest in outdoor sports or in other ways.

Entering students must file scholarship applications, together with the application for admission (\$5.00), by March 15, 1954. Applications should be made on regular scholarship blanks. It is ordinarily understood that candidates for Freshman scholarships will not have attended any other college or university. Candidates need not apply for specific freshman scholarships as each student is considered for any award for which he is eligible.

SCHOLARSHIPS FOR FRESHMEN

FOUR-YEAR SCHOLARSHIPS

George F. Baker Four Year Scholarships: Pomona is one of twelve colleges to receive a grant of \$50,000 from the George F. Baker Trust of New York, for the purpose of awarding scholarships to outstanding young men. The plan of the Baker Trust is to seek out future leaders of American society and to make it financially possible for them to attend college. Four or more scholarships will be awarded with stipends which may go as high as \$1250 annually, according to financial need. Open to men students only.

The Union Carbide Scholarships: Pomona College is one of a group of institutions participating in a nationwide scholarship plan established in 1953 by the Union Carbide and Carbon Corporation. These scholarships are designed to give aid to promising men and women who have an ambition to follow careers in business or industry. Three scholarships covering the complete cost of tuition for the full four-year academic course, with a reasonable

allowance for necessary books and required fees, are available in each entering class at Pomona. Twelve Union Carbide scholars will be in residence when the program is in full operation. Applicants must have good scholastic standing, be recommended by their schools, and either need financial assistance or possess extraordinary talent or ability.

Lockheed Scholarships: The Lockheed Aircraft Corporation has established at Pomona four-year scholarships for students concentrating in a subject applicable to a career in the aircraft manufacturing industry. Such fields of concentration may be either in the sciences or the social sciences. Lockheed Scholarships include full tuition and \$500 a year toward other college expenses.

Alumni Four Year Scholarships: Five or more scholarships will be awarded from the Alumni Scholarship Fund with stipends which may go as high as \$1,000 annually according to financial need. Open to men or women students.

The Kemper Foundation Scholarship: One four-year scholarship of \$750 per year is available from the James S. Kemper Foundation for a student who intends to enter the field of insurance administration. The Foundation will assist the incumbent in obtaining vacation employment with a casualty or fire insurance company, and on graduation will assist him in obtaining regular employment at current salary rates with a casualty or fire insurance company, in the expectation that such employment will continue for at least two years. A further grant may be available for a year of post-graduate study.

Maria K. Lloyd Scholarship: This four-year scholarship is available to an outstanding candidate who is now a resident and citizen of Greece or Turkey. The amount of the award will be determined by the student's need. It may cover as much as all college expenses for the full four years.

The above scholarships will be renewed for three years if the recipient's performance in college merits a continued award.

The four-year scholarships are awarded not only on the basis of the academic record but also on the all around contribution to the life of the secondary school and community, and the promise of such contribution in college and afterwards. Candidates for these scholarships should be nominated by the principal or headmaster of the secondary school. They are planned primarily for students who will need a substantial amount of financial assistance in order to be able to attend college. They may be awarded, however, to exceptionally promising students who have little if any financial need in which case the stipends may either be nominal or may be withheld entirely. In such an event the number of scholarships will be increased accordingly.

ONE-YEAR SCHOLARSHIPS

The following scholarships are available on a competitive basis to candidates for admission to the freshman class in the year 1954-55. Half of the stipend is available in the first semester and half in the

second semester of the freshman year. The award for the second semester is normally made only if the recipient is in good standing and has maintained a scholastic record of B or better.

The Henry E. Storrs and Julia A. Storrs Scholarships: Two scholarships of \$700 each, open to men.

The Margaret Burton Harwood Scholarships: Two scholarships of \$700 each, open to women. Two scholarships of \$700 each, open to both men and women.

The Thomas J. Dowling Scholarship: One award of \$600, open to a man or woman.

The Henry G. Brainerd and Fannie Howard Brainerd Memorial Scholarships: Two awards of \$700 each, open to men and women.

College Scholarships: Nine scholarships, varying in amount from \$200 to \$700 each, open to both men and women.

California Scholarship Federation Award: A scholarship of \$700 given by Pomona College to a man or woman nominated by the California Scholarship Federation.

Chemistry Contest Scholarship: A scholarship of \$700 is offered by Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Chemical Society. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

The Physics Contest Scholarship: A scholarship of \$700 is offered by Pomona College to a winner in the annual High School Contest sponsored by the Southern California Section of the American Association of Physics Teachers. The recipient must be among the top fifteen contestants, and must satisfy all entrance requirements of the College.

JUNIOR COLLEGE SCHOLARSHIPS

The following scholarships are available for candidates from junior college, for the year 1954-55, half of the stipend being available in the first semester and half in the second semester of the year. The award for the second semester is made only if the recipient is in good standing and has maintained a scholastic record of B or better. Candidates for Junior College scholarships are required to take the College Transfer Test given by the College Entrance Board. This test is given at the same times and places as the Scholastic Aptitude Test. For further information see pages 34 and 38 in this catalog.

Two-Year Scholarships: One or more, varying in amount from \$300 to \$900.

One-Year Scholarships: Two awards of \$700 each.

Leonard A. and Rose Chudacoff Scholarship: A two-year award available to a man who has completed two years of junior college work and gives promise of a distinguished career in the field of science. The amount of the award will cover tuition for the full two years and will also provide whatever additional funds are necessary for college expenses, depending on his need.

Alpha Gamma Sigma Scholarship: One award of \$700 given by Pomona College to a candidate who is recommended by Alpha Gamma Sigma.

SPECIAL SCHOLARSHIPS

The Amélie Augustine McAlister Scholarships: The late Mrs. Amélie McAlister Upshur of San Marino established at Pomona a fund of \$100,000, the income from which provides scholarships for women. McAlister Scholarships are available to women in any class who need financial assistance to attend college.

The Charles Harvey Rodi Memorial Scholarship: A scholarship of \$1000, established by Mrs. Lucina Rodi Updegraff, is available annually to a man studying toward a career in medicine. The award is made on the basis of ability and need, and may be available to the same student for more than one year, all at the discretion of the Committee on Scholarships.

The A. L. Hobson Memorial Scholarship: A scholarship of \$550 open to a man student from Ventura County, California, who needs financial assistance to attend college. The recipient may be a member of any class at Pomona.

The Knights Templar Scholarship: An annual scholarship of \$600 is provided by the Knights Templar Educational Foundation, Inc., of the Grand Commandery of California. It is awarded in recognition of those qualities of leadership and of manhood or womanhood which make for good citizenship. It is open to California residents of any Pomona class.

The Arthur Noble and Frances W. Noble Scholarship: A scholarship of \$550, endowed by the late Mr. and Mrs. Arthur Noble, is available annually to a student in any class who needs financial assistance.

The Paul Mylrea Holden Scholarship: An annual scholarship of \$500 established by Mrs. Susie Mylrea Holden in memory of her son, is open to students who need financial help. It may be awarded to a member of any class at Pomona.

The Everett S. Olive Orchestral Scholarship: An annual scholarship of \$250 is awarded to a qualified student on the basis of musical ability on an orchestral instrument. It is endowed anonymously in tribute to Everett S. Olive Emeritus Professor of Piano, whose interest has been an important factor in the development of the orchestra. It is normally given to a freshman. The scholarship is awarded on the joint recommendation of the Music Department and the Committee on Scholarships. An audition is normally required.

The Walter H. Parsons and Hazen M. Parsons Memorial Scholarship: A scholarship of \$200 given in memory of Walter H. Parsons, '04, and Hazen M. Parsons, '09, is available annually to a man or woman in any class who needs financial assistance to attend college.

The Donald Houghton Bacon Scholarship: The parents of Donald H. Bacon, who died at the college in 1948, have established in his memory a \$5000 scholarship fund, the income of which provides an annual award to a deserving student who prepared for college at the Tucson, Arizona, High School, and who is recommended by the Superintendent of Schools in Tucson. If in any year no graduate of the Tucson High School is recommended for the award, it may be made to a senior student at Pomona College, who upon recommendation of the faculty is considered the outstanding member of his class with respect to excellence in class work, athletic ability, and general participation in campus activities.

The John P. Evans Scholarship: A scholarship of \$500 available at Pomona College will be awarded annually to a man who has completed two years at Mount San Antonio College. One half of this sum shall be available for college bills in the junior year; the remainder for the senior year. Candidates for this scholarship, who will be nominated by the Director of Mount San Antonio College, must be of outstanding ability and give promise of becoming good students and leaders among their fellows. The candidate selected must meet regular admission requirements and conditions of competition prevailing at Pomona College.

SCHOLARSHIPS FOR MATRICULATED STUDENTS

The scholarships listed below are available during 1953-54 for students who attended the college during 1952-53, and who have satisfied the matriculation requirements. They are not available to entering students. These scholarships are awarded in open competition but normally require a grade point average of approximately 3.5. Half of the stipend is available in the first semester and half in the second semester of the year. The award for the second semester is normally made only if the recipient is in good standing and has maintained a scholastic record of B or better. The degree of financial need is taken into account in the awarding of all scholarships. Applications for these scholarships should reach the committee by May 15.

The Frank G. Builer Scholarships: Five scholarships of \$700 each, awarded to sophomores, juniors, or seniors who have achieved scholastic distinction.

The Olivia Phelps Stokes Scholarships: Three scholarships of \$700 each.

College Scholarships: Sixteen scholarships from \$200 to \$900 each depending on financial need.

The Kappa Delta Honor Scholarship: An annual scholarship of \$650 established in 1926 by alumni members of Kappa Delta Fraternity and administered under a special committee, is awarded at the beginning of his senior year to an outstanding all-around man, who shows qualities of character, intellect, leadership, sportsmanship, and proficiency in athletic pursuits. The recipient must have been in residence during all three lower years, and must rank in the highest third of all the men in his class.

The Phi Beta Kappa Scholarship: A scholarship of \$200 endowed by the Pomona Chapter of Phi Beta Kappa is awarded at the beginning of the second semester to a senior who has been in residence for three years at Pomona and who is selected for the high quality of his scholarship and his promise of future distinction. The award is open to both men and women.

The Nu Alpha Phi Memorial Scholarship: A scholarship of \$600 endowed by the members of Nu Alpha Phi Fraternity and awarded to a man at the beginning of his junior year. Selection is made by a special committee on the basis of outstanding character and real financial need, the latter partially determined by records of student employment during the school year. Given in memory of the Fraternity's losses in World War II.

The Flora Sanborn Pitzer Memorial Scholarship: A scholarship of \$500 from The Sanborn-Pitzer Foundation, established by Russell K. Pitzer of the class of 1900 in memory of his wife, is available to a woman student in the sophomore, junior, or senior class who has shown scholarship ability and who requires financial assistance to remain in college.

The Alice M. Sanborn Scholarship: A scholarship of \$500 annually endowed by the late Alice M. Sanborn, is available to a man selected by the Scholarship Committee as a representative student at the college, not necessarily of the highest scholarship standing, but who has high moral character. The candidate shall be selected at the beginning of his junior year, and shall receive the scholarship for both his junior and senior years in college, provided he shall remain, in the opinion of the Scholarship Committee, worthy of continued assistance.

The Malcolm Eversole Memorial Fund: A scholarship providing full tuition for a man in the Junior Class to be nominated to the Scholarship Committee by the President of the College at the end of the nominee's second year in Pomona College. The selection is based not on scholastic rank only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character.

The Llewellyn Bixby Memorial Scholarship: A scholarship of \$500 available annually to a man or woman who has completed the freshman year in Pomona College and who shows proficiency and genuine interest in science. Given by Mrs. Llewellyn Bixby, '01, in memory of her husband.

Andrew Acker Sugg Memorial Scholarship: A scholarship of \$475 available annually to a junior or senior man who shows promise of outstanding work in the field of science. This fund has been established by Mrs. Andrew Acker Sugg in memory of her husband.



Eli P. Clark Dormitories—Residence Hall for Men.

Frary Dining Hall for Men with Orozco Fresco.





Values in Living Are Gained from Dormitory Life at Pomona.

A Room in One of Pomona's Three Modern Residence Halls for Women.





The World's Foremost Musicians appear in Bridges Auditorium

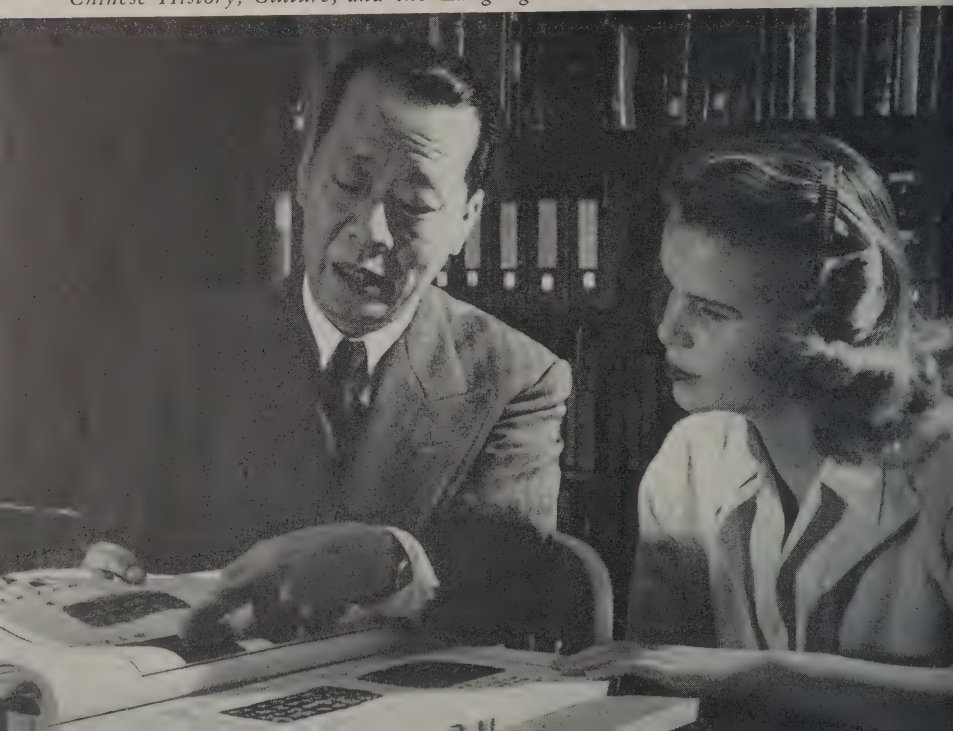
The College Administration is Housed in Sumner Hall, Pomona's First Building.





The Carnegie Building for Social Sciences.

Chinese History, Culture, and the Language Are Available to All Students.



The Andrew Fletcher Garst Memorial Scholarship: A sum of \$250 will be awarded annually at the beginning of the senior year to a deserving man or woman student who has benefitted most from his college experience of three years and who has also contributed substantially to the life of the college. The selection of the candidate, whose major should preferably be in music, art, or science will be made by a committee of nine students and the Deans of Men and Women. This award is given annually by friends in memory of Andrew Fletcher Garst, a member of the Class of 1952.

Bertha Lebus Scholarship: A scholarship of \$450 endowed by Miss Bertha Lebus is available annually to a matriculated student attending the college. The recipient must be a person who shows a high degree of promise and who needs financial assistance.

The Associated Men Students Scholarships: The Associated Men Students of Pomona College annually offer the two following awards: (1) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and proficiency in athletics. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year. (2) A scholarship award of \$100 to a man at the end of his Junior year who best exemplifies a combination of scholarship with leadership and attainment in extracurricular activities. To be considered for the award a man must have maintained at least a B average in all his college work, and must have been in residence at Pomona for at least one year.

The Jessie Gibson Scholarship Fund: An Associated Women Students Fund for scholarship awards to members of minority groups who exhibit high qualities of character, leadership and scholarship. The awards will be administered by the A.W.S.

DEPARTMENTAL SCHOLARSHIPS

ART

The Hannah Tempest Scholarships: Two scholarships of \$125 each are awarded annually to a man and a woman studying art, in accordance with conditions laid down by the donor, Mrs. Hannah Tempest Jenkins.

ASTRONOMY

The Shatto Memorial Scholarship: A scholarship of \$250 is provided annually from the income of the Walter O. Shatto and Clara R. Shatto Memorial Funds for a qualified upperclassman or graduate student majoring in the Department of Astronomy, the candidate to be selected on the joint recommendation of the department and the Scholarship Committee.

GEOLOGY

The Richard E. Strehle Memorial Scholarship: A scholarship of \$300 established in memory of Richard E. Strehle '41, who was killed in action in the Philippines in World War II, is awarded annually to a junior or senior man

with the physical, mental, and moral qualities desirable in a field geologist. Choice is made near the end of the sophomore or junior year, on nomination by the Geology Department to the Scholarship Committee. The award may be withheld in any year, and additional awards may be made in years when extra income is available.

MATHEMATICS

The J. Carlyle Bryant Scholarship: Established by Mr. and Mrs. George W. Bryant in memory of their son, J. Carlyle Bryant, '45. Available to an outstanding, all-around man in any class at the college, who possesses qualities of character, scholarship, and athletic ability, and who is particularly interested in mathematics. The amount of the scholarship varies from \$500 to \$900, depending on the need of the recipient. If there should not be a properly qualified candidate in mathematics, the scholarship may be awarded to a student in one of the other physical sciences.

MILITARY

The advanced course of the Reserve Officers' Training Corps consists of Military Science III and IV. Students who have completed the basic course (Military Science I and II) or who are accorded equivalent credit because of military or naval service are eligible for enrollment in the advanced course. Students enrolling in the advanced course enter into an agreement to complete the two year course and attend one summer training camp of six weeks. In consideration of this agreement, students receive from the United States Government cash allowances equivalent to a scholarship of about \$310.00 per year. All necessary expenses in connection with camp, including transportation to and from the camp, food, housing, uniforms and medical attention are provided by the government.

Advanced course ROTC students whose attainments in military science are outstanding may be designated by the Professor of Military Science as "Distinguished Military Students." A number of distinguished military graduates of Senior ROTC Units may be selected upon application for direct Regular Army appointments.

The number of students admitted to the advanced course is limited by available appropriation and to that number recommended by the college authorities as being well-qualified to pursue the course. The selection of students for enrollment in the advanced course is based upon excellence in military training and suitability for appointment as second lieutenants in their branch of the U. S. Army Officers' Reserve Corps. Students who present evidence of above average records while in military or naval service, or who have distinguished themselves in the basic ROTC course of this or other schools will receive special consideration in the selection of those students to be enrolled in the advanced course.

MUSIC

The Kate Condit Memorial Scholarship: A scholarship of \$100, endowed by the late Mr. and Mrs. A. P. Condit, is awarded annually to an outstanding student in the Department of Music.

The William J. Howard Memorial Scholarship Fund: Established by alumni and friends in memory of William J. Howard, '14. A scholarship of \$145 is awarded annually to a student for lessons in applied music.

The Presser Foundation Scholarships: A fund of \$250 is given to the college annually by the Presser Foundation of Philadelphia, for the assistance of music students. Scholarships from this fund are awarded by the Music Department. It is planned for students who are interested in music education or other advanced work in music.

PHYSICS

The Richard P. Edmunds Memorial Fund provides a scholarship of full tuition for an upper division man student (preferably one who has attended Pomona during the first two years) nominated to the Scholarship Committee by the Professor of Physics.

RELIGION

The Claremont Church Scholarship: A scholarship of \$250 to be awarded each year to an upperclass student planning on life-time Christian service or to a senior about to enter seminary training. Choice is made in the spring by the Scholarship Committee upon nomination from the Department of Religion acting in consultation with the minister and a member of the World Service Committee of the Claremont Church.

FELLOWSHIPS AND SCHOLARSHIPS FOR GRADUATE WORK

The following awards may be made for 1954-55 to graduating seniors if qualified applicants appear. Applications should be in the hands of the Committee on Scholarships by March 15, 1954.

The Henry Martyn Bracken Foundation and the *Emily Robinson Bracken Foundation* provide two or more fellowships for graduate work in the Claremont Graduate School. When in any year a graduating senior does not qualify for the award, the stipend may be given to an undergraduate student in Pomona College.

The C. E. and Bertha M. Harsh Memorial Scholarship Fund in the Claremont Graduate School provides income for scholarship aid to Pomona College graduates. Although the Board of Fellows is empowered to make grants of the income for the assistance of any capable and promising graduates of Pomona College attending the Claremont Graduate School, it is the preference of the donors that first consideration should be given to those who are doing advanced work in the Fine Arts.

The William Lincoln Honnold Foundation provides a fellowship with a stipend determined by the committee of award according to individual circumstances. The award is open normally only to graduating Seniors who have done four full years of work in Pomona College, who are rated in the upper

half of the graduating class on the basis of their performance during both the junior and senior years, and who wish to continue their studies either in the Claremont Graduate School or elsewhere in America or abroad.

The prime purpose of the fellowship is to promote original and creative achievement in the candidate's chosen field of activity rather than merely to reward faithful classroom work. Preference will be given to candidates preparing for scholarly rather than professional work. The selection will be based not on scholarship only but on the possession of those personal qualities which indicate a high degree of promise in a student of outstanding character. The plans for graduate work are to be made in consultation between the candidate and the Committee on Scholarships, the committee having final authority.

University of Chicago Law School Scholarship: A scholarship in the School of Law at the University of Chicago will be awarded by the Pomona College Committee on Scholarships. Stipend is normally \$642.00 and is renewable for two years if the student's record is satisfactory.

The Committee on Scholarships also nominates students of Pomona College who wish to apply for awards by other institutions and foundations.

CLAREMONT GRADUATE SCHOOL SCHOLARSHIPS

In addition to the awards for graduating seniors offered through Pomona College, scholarships for graduate work are available at the Claremont Graduate School.

Three Honnold Scholarships, two of \$750 each, and one of \$500 are awarded in the field of Oriental Affairs. General scholarships of \$750 to \$1,000 each are available for work in the field of the candidate's choice. A few graduate assistantships with a stipend of \$600 and half tuition in the Claremont Graduate School are available through Pomona College and Scripps College.

STUDENT AID

In addition to the scholarship awards, the college is able to make some grants-in-aid available to students doing satisfactory academic work who require financial assistance to continue at Pomona. To this end the income of certain endowed funds is supplemented by a budget appropriation. Normally applications for aid can be considered only from students who have completed one year in Pomona College, who are or intend to become candidates for a degree from Pomona College, who maintain a high standard of

honor, who are economical in their habits, who are regular in their attendance upon college exercises, and who maintain at least C grade in their scholastic work. Recipients of grants-in-aid are expected to earn part of their college expenses by employment during vacations and term time.

Aid may be withdrawn at any time from students who prove not to have conformed to the conditions.

If a student who has received a grant-in-aid transfers to another institution of comparable cost before graduation the total sum granted him by Pomona College will become a loan, repayable according to the terms applicable to regular student loans.

It is customary to extend loans only instead of grants to students who are in the second semester of the senior year.

All applications for aid should be made to the chairman of the Committee on Scholarships and Student Aid, Sumner Hall, before May 15 for the following academic year. Emergency requests for the second semester should be submitted before January 15 for the second semester of the current academic year.

— STUDENT AID FUNDS

The income from the following funds is available for student aid:

The Francis Bancroft Memorial Fund of \$1500, given by Mrs. James T. Ford in memory of her father.

The L. H. Barrows Fund of \$2500.

The H. G. Billings Memorial Fund of \$1000.

The Florence G. Bixby Fund of \$5000.

The Hagop Bogigian Fund of \$31,402.

The Sherlock Bristol Memorial Fund of \$400.

The Bessie A. Brown Memorial Fund of \$800, given by Mrs. Fannie E. Brown.

The Henry Herbert Brown Memorial Fund of \$1000 given by Mrs. Fannie E. Brown in memory of her son.

The Class of 1918 Fund, \$961.

The Charles C. Cragin Memorial Fund of \$5025, given by Mrs. Laura E. Cragin in memory of her husband, Rev. Charles C. Cragin.

The Agnes K. Crawford Memorial Fund of \$1000, given by David R. Crawford and William Crawford in memory of their mother.

Ebell Club of Pomona Student Aid Fund of \$1000. To help a woman student.

The Elwood Fund of \$2600, given by Mary E. Elwood.

The Ford Fund of \$2500, given by Rev. James T. Ford.

The Margaret Fowler Fund of \$1000.

The Orren A. Gorton Fund of \$5000.

The Emma K. Guild Fund of \$44,887.

The Manette Hand Memorial Fund of \$1500.

The Alfred James Harwood Memorial Fund of \$8000.

The Charles E. Harwood Fund of \$5000.

The Thomas F. Howard Memorial Fund of \$3500, given by Dr. and Mrs. H. G. Brainerd in memory of Mrs. Brainerd's father.

The Mary Marvin Janes Fund of \$679.

The Helen Day Jewell Fund of \$1000.

The Henry L. Kuns Fund of \$2000.

The Jean Loomis Fund of \$2000.

The Howard J. Mills Memorial Fund of \$3000.

The Ontario Congregational Church Fund of \$186, given by the Ontario Congregational Church toward the endowment of a fund.

The Page Fund of \$5000, given by Mrs. Loraine H. Page. (Three thousand dollars of this may at some time be used for other purposes.)

The Arthur Warren Phelps Memorial Fund of \$2000, given by Mrs. C. S. Phelps and Mr. C. A. Phelps in memory of their son and brother.

The Lydia Phelps Memorial Fund of \$4000.

The Pilgrim Church of Pomona Fund, \$2002, given by the Pilgrim Congregational Church of Pomona.

The Pilgrim Church Women's Auxiliary Fund of \$556, given by the Women's Auxiliary of the Pilgrim Congregational Church of Pomona.

The John D. Potter Memorial Fund of \$2000, given by Mrs. S. T. Potter in memory of her husband.

The Anna H. Searing Fund of \$1800.

The Clyde H. Shields Memorial Fund of \$2000, given by R. P. Shields in memory of his oldest son.

The Lucia Glidden Strong Fund of \$911.

The Sweet Memorial Fund of \$2500, given by Harlan P. Sweet in memory of his wife.

The Maria T. Wardwell Fund of \$1000.

The Clara B. Waterman Memorial Fund of \$5000, given by Miss Rosa May Bennett.

The Henry S. West Fund of \$2000.

SPECIAL FUNDS

The Crombie Allen Scholarship Fund of \$1000, half of the income available annually to a graduate of Chaffey Union High School and half to a graduate of Chaffey College of Ontario, California.

The Martha E. Berry Memorial Fund of \$6000, for foreign students.

The Mabel S. Bridges Memorial Fund of \$3500, available for women.

The Alice Paul Harwood Scholarship Fund of \$5000, open to graduates of Chaffey Union High School of Ontario.

The Stella M. King Scholarship and Loan Fund for Women, \$10,000.

The Francis M. Price Fund of \$1000, for children of missionaries.

LOAN FUNDS

The college also administers loan funds by which it is possible to cooperate with the urgent need of students in making available to them amounts sufficient to cover tuition fees. Interest at the rate of 4% per annum begins on graduation or at the time of leaving the college. Loans from the following funds may be available, applications for which should be addressed to the Committee on Scholarships and Student Aid.

General Loan Fund of \$74,485.

The Caroline Phelps Stokes Fund of \$25,000, endowed by the will of Olivia Eggleston Phelps Stokes in memory of her sister, income from which is available for loans.

The Ethan Allen Chase and Augusta Field Chase Fund of \$6538, available for men.

The Ray Loan Fund of \$1561, given by Mrs. E. F. Ray, to provide a means of meeting situations of temporary need.

The David Clark Fund of \$1162.

The Robert C. Denison Memorial Fund of \$581.

The Lucy B. Jencks Memorial Fund of \$419, established by the Claremont Chapter of the D.A.R., available for a senior girl designated by the Dean of Women.

The Edwin C. Norton Memorial Loan Fund of \$1575, available for undergraduate students, or for graduates of the college who wish to pursue advanced work in other institutions.

The C. F. Baker Memorial Loan Fund of \$216, available for undergraduate students, preferably juniors or seniors, in the departments of Botany and Zoology, who are approved by the heads of those departments.

The A. G. McKenna Loan Fund of \$2940, available to graduating seniors for advanced work at the institution of the student's choice.

The Anna Bruce Memorial Loan Fund for Women, of \$530.

The Associated Women Students Loan Fund, administered by the Dean of Women at the request of the Associated Women Students, makes available for women students short term loans for personal emergencies. It is not normally used for loans to meet college bills. Interest at the rate of 4% begins after a period of two years.

The Associated Men Students Loan Fund, established in 1931, is available for loans in small amounts to meet personal emergencies or short-term personal needs of Pomona men. It is not intended to be used to pay college bills. For a special need a loan may be issued on a long-term basis. The interest rate is 4%. The fund is administered by the Dean of Men at the request of the Associated Men Students.

STUDENT EMPLOYMENT

The College endeavors to find employment for students needing to earn part of their expenses. Many are thus helping themselves by various forms of labor such as baby sitting, janitor work, waiting on tables, general house work and gardening.

Applications for aid in securing employment should be addressed to the Director of Placement Service, Sumner Hall.

PRIZES AND AWARDS

GENERAL

The following prizes and awards are available for general accomplishments and for proficiency in the work of the several departments:

The Rena Gurley Archibald High Scholarship Prize: A prize of \$50 to be awarded to that member of the graduating class taking the B.A. course and ranking highest in scholarship was established by the bequest of the late Reverend Andrew W. Archibald, D.D.

The Arvid Pierre Zetterberg Award: From a fund endowed by Mr. and Mrs. A. P. Zetterberg in memory of their son, Lt. Arvid Pierre Zetterberg, an annual award of \$50 is made to the sophomore man who during his freshman year exemplifies the highest qualities of character, scholarship, and interest in manly sports. The award is made on nomination of the Scholarship Committee and is presented at the Opening Convocation in September.

ART

The Rembrandt Club Art Prizes: A first prize of \$25, and a second prize of \$10, are awarded by the Rembrandt Club for excellence in drawing and design, in work presented for the annual student exhibition.

The Rembrandt Club Art History Prize: A prize of \$10 is given by the Rembrandt Club for the best paper presented in the course in History of Art.

ASTRONOMY

The Moncrieff Astronomy Prize: A prize given to the student in the first year course in Astronomy, taken regularly in class, whose interest in the study and proficiency in the observatory work are indicated by the best notebook kept in accordance with the teacher's suggestion. A prize of \$20 is given by Miss Flossie C. Moncrieff, '11.

BIOLOGY

The Vaile Prize: A prize of \$15 to be awarded to an outstanding student in Botany or Zoology was endowed by the late Mr. Charles S. Vaile.

CHEMISTRY

The Stanley D. Wilson Prize: A prize of \$25 endowed by Dr. Stanley D. Wilson is awarded annually to the student whose independent study in research shows greatest promise for creative work.

CHEMISTRY-GEOLOGY

The James A. Lyman Prize: A prize of \$100 awarded at the beginning of the college year to a senior student majoring in chemistry or geology who, in the opinion of the chemistry-geology faculty, shows special promise of achievement in research or teaching, or both. Established in memory of Dr. James A. Lyman, Professor of Chemistry 1909-1926, by his son, Dr. George A. Lyman, '26.

EDUCATION

The Ada May Fitts Education Prize: A prize of \$50 endowed by Mr. Charles T. Fitts in memory of his wife, Ada May Fitts, is awarded annually to a student for excellence in courses in the Department of Education and for unusual promise in the educational field.

ENGLISH

The John Dye Award: From a fund established by Mr. and Mrs. John Thomas Dye in memory of their son, John Thomas Dye, III, who was a lieutenant in the Army Air Corps, is offered an annual award of \$100 for the best piece of original writing to appear in a student publication. The award is announced at Commencement time.

The F. S. Jennings Memorial Prizes: Three prizes for men and three prizes for women of \$50, \$40, and \$30, respectively, for excellence in English are available each semester to members of the Freshman class taking English I. In the award of these prizes attention is given to the interest shown by the student in improving the quality of his written and spoken English.

GOVERNMENT

The Edward M. Sait Prize: A prize of \$5 for the purchase of a book relating to American or comparative government, or for a membership in the American Political Science Association, is awarded to the student doing the best work in the basic course in government.

The Russell M. Story Prize: A prize of \$5 for the purchase of an appropriate book, or for a student membership in the American Society for Public Administration, is awarded to the student doing the best work in the course in public administration or in state and local government.

The George S. Burgess Prize: A prize of \$5 for the purchase of an appropriate book, or for a subscription to a selected law review is awarded to the student doing the best work in the course in legal history or constitutional law.

INTERNATIONAL RELATIONS

The Cordell Hull Prize: An award of \$50 is offered annually to the student who submits to the committee on International Relations the best essay on a problem relating to the United Nations. Subjects must be cleared with the secretary of the committee on or before April 1, and the essays between 2500 and 3000 words in length, must be submitted in triplicate on or before May 1. In case no one essay is of outstanding merit, the committee reserves the right either to divide the honors or to make no award.

LATIN

The Mudge Latin Prizes: First and second prizes of \$10 and \$5, respectively, for excellence in Latin are endowed by friends of the College.

LIBRARY

The Eda May Haskell Library Prize: A prize of at least \$15 in the form of a purchase order for books is offered for the best library submitted by a senior student, not necessarily for the largest or most expensive collection but for the most intelligently selected books in one or more fields of the student's interest.

MATHEMATICS

The Llewellyn Bixby Mathematics Prize: A prize of \$10 for excellence in Analytic Geometry and Calculus; open to all students completing both Mathematics 1 or 52 and 65.

MUSIC

The Barbara Sanford Allen Prize: An annual competitive prize of \$50 to be awarded to a student in the department of music, above freshman rank. This award is made possible by the husband and parents of a graduate of the Class of 1915 of Pomona College.

PHYSICS

The Tileston Physics Award: A prize of \$50 to the junior student in physics whose record in course and department work is judged most promising.

The Tileston Survey Physics Prize: An award of \$10 to the outstanding student in the Physics 1 course.

These prizes have been established by former students of Professor Roland A. Tileston and by members of his family.

PUBLIC SPEAKING

The Kinney Declamation Prizes: A prize declamation contest open to members of the Freshman class occurs early in the second semester. First, second, and third prizes of \$25, \$20, and \$15, respectively, are endowed by Mrs. H. N. Kinney.

The Dole Debate Prizes: A prize debate for lower-division men is held near the close of the second semester. First and second prizes of \$30 and \$20, respectively, established by the late Mr. John H. Dole in memory of his father, Mr. William B. Dole, are endowed by Mr. Arthur M. Dole, '96.

The Stella King Prizes: The opportunity to compete for prizes totaling \$75 for speeches of their own composition is offered to upper-division students. The judges have the right to distribute the prize money among the contestants as they see fit, or to withhold all awards if they feel warranted in so doing. These prizes were endowed by the late S. H. Wheeler, in memory of Miss Stella King.

RELIGION

The Hager Prize: A prize of \$10 for the best essay on a foreign missionary subject, open to all students, was endowed by the late Mr. and Mrs. C. R. Hager.

General Information

LIBRARY

THE POMONA College Library, housed in the Honnold Library building, contains a book collection of 131,000 volumes, a collection of 163,000 bound and unbound United States and California government documents, and an uncatalogued pamphlet collection. Pomona subscribes to 700 periodicals and maintains bound files of approximately 550, many of which are complete. Especially valuable are the periodical holdings in the field of natural science. The library is a depository for U. S. Government Documents, California State Documents, and the publications of the Carnegie Institution.

The following special collections are a part of the general library: the Cook-Baker Biological Library and the Parish Botany Library in Crookshank Hall and the Rancho Santa Ana Botanic Garden building; the James A. Lyman Memorial Library of Chemistry and the Geology Library in Mason Hall; and the Mathematics and Physics Library in Pearsons Hall. Housed in the main building are the Mason California, the Wagner North Pacific, the McCormick Korean Libraries, and the Viola Minor Westergaard and Carnegie Art Collections.

In addition to the Pomona College Library, the Honnold Library also houses the libraries of the Claremont Graduate School, Claremont Men's College, and a part of the library of Scripps College. The library of the Claremont Graduate School contains approximately 75,000 volumes, and the Claremont Men's College Library approximately 6,500 volumes. The main Scripps College Library of approximately 40,000 volumes is housed in the Ella Strong Denison Library. It contains in addition to its general collection the Macpherson Collection of books about women, and the Stephenson Memorial Collection of American History.

PUBLICATIONS

The stated publications of the College are issued as numbers of the *Pomona College Bulletin*, which is published monthly except July and August. These include: the *Annual Catalog*, the *Report of the President*, and the *News Letter* for Alumni.

LECTURE FOUNDATIONS

The Joseph H. Johnson Foundation, endowed by Miss Ellen B. Scripps, provides an annual income for the purpose of bringing distinguished lecturers to Pomona for a protracted stay and intimate participation in college life.

The Clark Foundation, established by Mr. Arthur O. Clark, makes it possible for the College to offer each year a lecture or course of lectures in the general field of religion.

The Henry D. Porter Foundation, named in honor of the late Rev. Henry D. Porter, for many years a missionary in China, provides for a lecture by some prominent worker in the field of Christian Missions.

PUBLIC ASSEMBLIES

A general assembly of the college is held each Thursday at 11 a.m. for the purpose of hearing visiting lecturers or members of the faculty discuss topics of interest to the whole institution. This assembly period is also used for student body and class meetings. On five stated occasions throughout the year, including the opening of each semester, College Convocation is held. Full attendance of both faculty and students is expected at these exercises.

RELIGIOUS ACTIVITIES

The four Associated Colleges at Claremont unite in a College Church which holds its services each Sunday morning at eleven o'clock in Bridges Hall of Music. The Church is the coordinating force for religious activities among the colleges. Students participate in the services and there is a special student choir for the Church.

The College Chapel, which is altogether a service of worship, is held every Tuesday morning from 11:00 to 11:25 in Bridges Hall of Music. Both students and faculty participate in the program, at which attendance is voluntary.

Various expressions of religious interest and forms of religious activity exist on the Pomona campus: worship, study and discussion groups, campus and community programs of service, and contacts with intercollegiate enterprises. These interests and their sponsoring organizations are united in the Pomona College Christian Association as a central, campus-wide agency to encourage interest in religion and to develop religious activities.

The Association maintains relationships with the national Student Christian Movement and the World Student Christian Federation. Through one of its committees it joins with the College in sponsoring the weekly Chapel service. Under its or the College auspices, or that of both, certain occasions of special religious emphasis are provided during the course of the academic year: seasonal celebrations, retreats and conferences, visitations to the campus by prominent religious leaders.

Opportunities for Sunday morning worship are also available in the Claremont churches which welcome the participation of students in their activities.

MUSIC

The College cooperates with Scripps College, Claremont Men's College, and the Claremont Graduate School in the presentation in the Bridges Auditorium of the most distinguished masters in the field of music. Regularly included in the series is the Los Angeles Philharmonic Orchestra.

For the concerts thus afforded an annual ticket is furnished to every full-time student without extra charge.

Under the auspices of the Pomona College Department of Music complimentary public recitals by individual students and members of the faculty and by groups are given frequently throughout the year. These are usually given on Monday evenings.

The College Symphony Orchestra, the Choir, the Men's and Women's Glee Clubs, the Band, and chamber music groups, afford opportunity for the study and public performance of the finest in ensemble music.

CAMPUS ORGANIZATIONS

The Associated Students. This association coordinates all student activities. Its officers are chosen by the student body from among their own number. All important questions are first considered by the Executive Council, a governing group composed of class presidents and chairmen of other organizations representing various activities of campus interest. These students are responsible not to the organizations which they represent on the Executive Council but to the Executive Council itself.

Associated Men Students and Associated Women Students. These organizations consider and promote the special interests of the men and women respectively.

Class Organizations. Each of the four college classes is organized for the purpose of promoting class social life.

Phi Beta Kappa. The Pomona Chapter of Phi Beta Kappa is the Gamma of California. Upperclassmen "who are of good moral character, who are candidates for the degree of Bachelor of Arts, and who are distinguished for breadth of culture and excellence of scholarship" are eligible to membership in the Phi Beta Kappa Society.

Honor Societies. Ghosts; Mortar Board; Gamma Chapter of Alpha Kappa Delta, Sociology Fraternity; California Alpha Chapter of Kappa Mu Epsilon, National Honorary Mathematical Fraternity.

Departmental Organizations. El Circulo Español, Le Cercle Français, German Club, Caduceans, Economics Club.

Musical Organizations. Men's Glee Club; Women's Glee Club; Music Club, Symphony Orchestra, Chamber Music Groups, Band.

Dramatic and Literary Organizations. Drama Productions Committee, Masquers and Thespians, in Dramatics; and Orchesis, in Dancing; MSS, literary magazine.

Other Organizations. Camera Club; Ski Club; Women's Recreational Association.

Local Social Fraternities. Alpha Gamma Sigma; Kappa Delta; Kappa Theta Epsilon; Nu Alpha Phi; Phi Delta; Sigma Tau. Each fraternity has a club room in one of the residence halls on the men's campus. Approximately one-third of the men students belong to the fraternities which pledge new members during the sophomore year. There are no sororities on the campus.

STUDENT PUBLICATIONS

The *Student Life* is published twice a week by the student body and is devoted to campus affairs.

The *Metate* is the yearbook published by the Associated Students.

The *Hand Book*, which contains material designed especially for new students, is issued at the beginning of the year by the Associated Students.

SUPERVISION OF CONDUCT

Pomona College assumes that most of the matters which affect the college are of concern to both faculty and students and believe that the experience and the judgment of both should be taken into account in the management of much of the college life. For this reason a large number of the policy forming committees of the college have both faculty and students as voting members. These committees now include the following: Admissions, Athletic Council, Personnel, Public Events, Religious Activities, Student Affairs and Vocational Counseling and Placement.

Pomona College assumes that its students, having voluntarily enrolled in the college, are in sympathy with its purposes and philosophy, and will abide by its accepted practices. This basic philosophy is that all members of the college community will govern their conduct by standards of good taste and ethical judgment. Any behaviour on or off the campus which may bring discredit to the individual or to the College may result in disciplinary action.

The use or possession of alcoholic liquors of any kind on the campus is prohibited by the college.

The faculty has placed the interpretation and execution of these policies in the hands of the Committee on Student Affairs which consists of the deans and certain faculty members appointed by the President and four student members appointed by the Executive Council of the Associated Students. Under this Committee as policy-making body functions the College Life Council, composed of six faculty members appointed by the President and nine student members elected partly by the student body and partly by the Executive Council of the Associated Students.

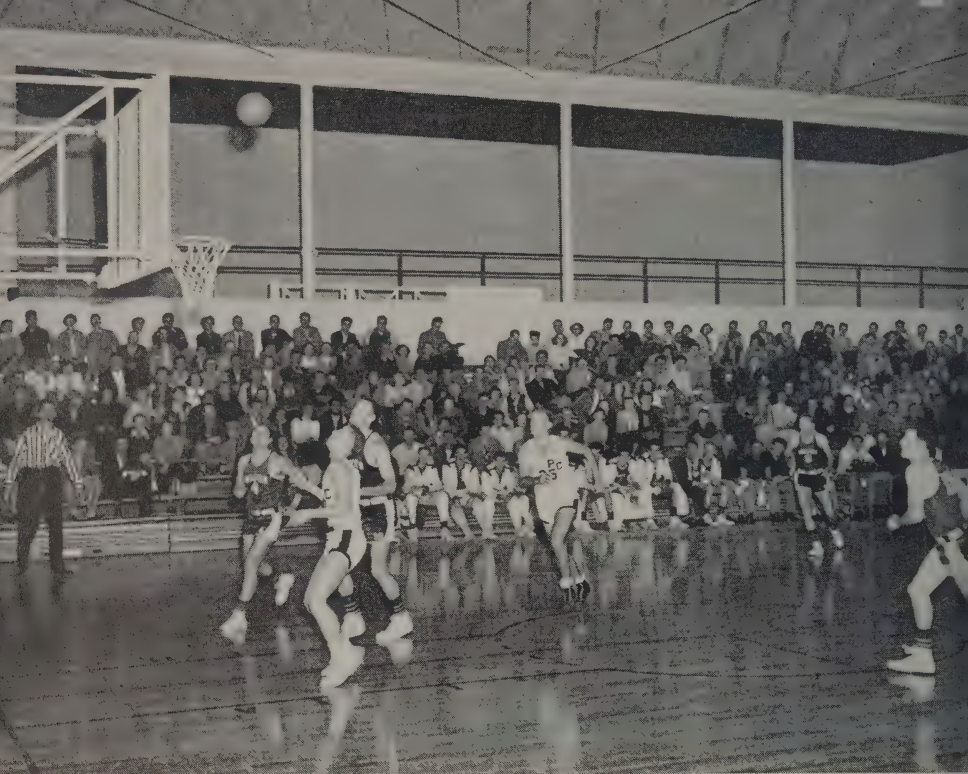
At the present time the College Life Council has been delegated the responsibility for the administration of discipline, for dealing with inter-class rivalry, for supervision of fraternities, for regulations governing the use of automobiles, and for dealing with infringements of academic honesty and honor. It is probable that additional responsibilities will be assigned to the College Life Council from time to time.



Those Who Have Seen Marston Quadrangle Will Ever Remember Its Beauty.

Field Trips to Nearby Mountains and Desert Are Part of the Geology Courses.





The Memorial Gymnasium Affords Excellent Athletic Facilities.

Pomona Has Maintained Since 1919 a Voluntary Unit of the ROTC.



The Judiciary Council of the Associated Women Students and the Judiciary Council of the Associated Men Students administer regulations concerning conduct in the residence halls on their respective campuses, and, acting together as a joint body, carry out the policies of the College Life Council and act as a court or an advisory body in matters of discipline, except in those which are judged by the means to involve serious problems of personality adjustment.

Individual or collective student enterprises which use the college name and involve the absence of the participants from the college must receive the official sanction of the Committee on Student Affairs.

AUTOMOBILES

Rules governing the use of automobiles are formulated and administered by the College Life Council. Students maintaining cars in Claremont are subject to the following regulations:

Registration and liability: Ownership of the car, together with its license number, must be registered with the office of the Dean of Men or the Dean of Women at the opening of college or within three days after the car is driven in Claremont. The student is responsible for having on the windshield of his automobile the Portion sticker issued at the time of registering the car. At the same time, the College Life Council also requires that owner furnish evidence of having liability insurance.

Student drivers must at all times, both on and off the campus, exercise particular care and consideration for the safety of themselves and others, and must acquaint themselves with the state and local traffic laws and comply with their observance.

Failure to comply with the above regulations shall constitute an offense against the college, the penalty for which may include sequestration and storage of the car at the student's risk and expense for a period not beyond the end of the term in which the offense occurs.

Campus Fee: Students who use the campus streets, grounds and parking lots for overnight parking will be charged a fee of \$4.00 a semester. Those who have their cars on campus during the day only will be charged \$2.00 a semester. Reduced fees will be charged for a period of less than one month.

MEDICAL AND PHYSICAL CARE

Pomona College, in cooperation with Scripps, Claremont Men's College, and the Claremont Graduate School, engages the full-time services of two physicians to care for its students.

The medical advice of the college physicians is ordinarily available, free of charge, to all students, subject to certain conditions of hours and location of residence. Minor ailments are treated at the Baxter Medical Building or at the Infirmary, which is used for cases requiring nursing and certain types of hospital care. All surgical dressings and medicines are at the expense of the ill or injured, as is also medical service in chronic or prolonged illness or in case of accident, or an acute illness beyond ordinary first-aid emergency treatment. The college nurse visits the residence halls each morning in order to see those students reported ill.

The student is entitled to two days each semester at the College Infirmary without charge for room and meals. If illness requires hospitalization for additional days, the charge is five dollars per day. The College, however, reserves the right to discontinue this individual medical service at any time, without previous notice.

The College does not assume responsibility for the complete medical care of all its students, but only in so far as its present facilities will afford. Preventive medicine and campus health functions are stressed in the college medical program.

The College has completed arrangements by which its students may purchase group health and accident insurance at special rates and it advises students to avail themselves of this opportunity. Detailed information about this insurance may be secured from the Dean of Students or from the college physicians.

Students are expected to conform to the medical regulations of the college.

PHYSICAL ATTENTION AND REQUIRED PHYSICAL EXAMINATIONS

The physical care of students is a matter of special concern to the college. The medical certificate required of all applicants prior to admission includes a certificate of recent successful small-pox vaccination and a certificate of satisfactory tuberculin test, or an x-ray of the chest, performed within the preceding six months. Any student, while in college, may be required to present each year

follow-up certificate of examination for tuberculosis. Regular work in physical education is prescribed throughout the four years, and courses in physiology and hygiene are given. Supervision is given to athletics throughout the college year.

Required examinations after admission: Every student on entering college is given a physical examination under the direction of the College Physician. All new students entering in the fall semester are required to complete the examination during New Student Days or by November 1, and those entering in February are required to complete it by March 1. Failure to meet this requirement within the announced time limits will result in the temporary withdrawal of the student's privileges of registration and class attendance until the requirement is met.

Each academic year a student is in residence he is required to complete the free chest x-ray examination while the mobile x-ray equipment is on campus or at his own expense within fifteen days thereafter. Failure to meet this requirement will result in the suspension of privileges of registration and class attendance until notice has been received from the physician of the Associated Colleges that the requirement has been met.

ATHLETICS

Pomona College and Claremont Men's College unite to conduct a joint program of intercollegiate athletics, under one coaching staff, as a member of the Southern California Intercollegiate Athletic Conference. Our teams, known as the "Sagehens," compete in football, basketball, track and field, baseball, cross country, swimming, golf and tennis.

In addition to the program of intercollegiate sports the College maintains an extensive program of intra-mural sports open to all men students.

The direction and financial management of athletics rest with the Director of Athletics, who has associated with him as an advisory body the Athletic Council, composed of three members of the Pomona Faculty, one member from the Claremont Men's College Faculty, three student members from Pomona and two student members from Claremont. Under the general manager, there is a student manager for each sport.

The college endeavors to safeguard students in the use of its physical education facilities, athletic fields, and gymnasiums, and

to this end the department has established regulations concerning the use of such facilities, but it is clearly understood that students who use the same do so entirely at their own risk.

ASSOCIATED COLLEGES COUNSELING CENTER

The Associated Colleges maintain a Psychological Clinic under the direction of a Clinical Psychologist. The Director of the Clinic, Dr. Evelyn Troup, works in conjunction with the college physicians, Dr. Gilbert S. Coltrin and Dr. D. Scott Fox, and with Dr. Mehl McDowell, a psychiatrist. The Clinic offers remedial instruction, vocational testing and consultation and counseling on personal and emotional problems. Most of the services are open to Pomona students without charge, including one consultation with the psychiatrist. The cost of any additional consultations with the psychiatrist must be met by the student.

VOCATIONAL COUNSELING AND PLACEMENT

Through faculty advisers and the personnel services of the college students receive assistance in their choice of a career. The college maintains a vocational counseling and placement service for the benefit of alumni and students. Many alumni cooperate with the Director of the Placement Service, in assisting seniors and graduates to find employment.

This service aims to provide reliable occupational information concerning representative business organizations, government agencies, the professions, and other opportunities for employment.

Each year conferences on careers for men and women are held on campus under the sponsorship of the academic departments and the faculty and student committees on vocational services.

A Vocational Information Center is maintained in the Honnold Library with information on vocations in this country and opportunities for placement abroad and for foreign study. Information on scholarships and fellowships for graduate study is made available to interested students by the Scholarship Committee, the Vocational Information Center at the Honnold Library, and department offices.

Students are given the opportunity to take vocational interest tests, and to consider the results with the Dean of Men or the

Dean of Women or with other faculty advisers. Deans and advisers are available throughout the year to discuss with students their choice of academic fields of concentration as well as their vocational and personal goals.

SUMMER SESSION

The Claremont Summer Session is sponsored jointly by the Claremont Graduate School, Pomona College, Scripps College, and Claremont Men's College. A Bulletin describing summer work is issued annually. Requests for information should be addressed to the Director of the Summer Session, Harper Hall, Claremont, California.

The Curriculum

THE PURPOSE OF Pomona College is to prepare students for a society which expects of them leadership in diverse roles and offices, humble or great. The college endeavors to help its students toward a life in which professional achievement is accompanied by personal happiness, cultural balance, and social responsibility. Its program, therefore, includes courses intended for general education as well as courses designed for specialized study and preprofessional training.

The immediate objective of general education, as expressed in the course requirements of the College, is to help the student in his development of:

1. Ability to use the English language effectively, in reading, in writing, and in speech.
2. Knowledge of scientific thought and method.
3. Understanding of the historical development of our civilization.
4. Understanding of human society, its problems and its institutions.
5. Understanding of the nature and operation of the American economic and political institutions.
6. Appreciation of literature and the fine arts.
7. Appreciation of ethical and spiritual values.

With these purposes in mind, the College requires that certain courses be taken in the Freshman and Sophomore years.

To secure the benefits of intellectual discipline derived from concentrated study, and at the same time, in many instances, to prepare for professional training after graduation, every student upon entering the Sophomore year is required to select a field of concentration in which he will complete not less than twenty-four units of upper-division work during his Junior and Senior years. The field of concentration may be represented by one department or may extend beyond departmental limits to include closely related subjects. For students of outstanding ability and well-defined interests, the field of concentration may be developed into a pro

gram of honors study. These requirements and programs of study are described in detail in the following pages.

FACULTY ADVISERS

Each new student is assigned to a faculty adviser, with whom he works during his first year in college. At the end of that time, in the light of the student's interest, an adviser is assigned with whom the student will work during the remainder of his college course. If at any time a change is deemed wise it is made through the Dean of Students.

SUMMARY OF REQUIREMENTS FOR THE DEGREE

Pomona College awards only the bachelor of arts degree. Commencement honors are awarded (1) on the basis of the over-all average of the student's work, and of the comprehensive examination, and (2) on the basis of the completion of a program in "Honors Study." These honors are further described on page 91.

Units: One hundred and twenty-six units (semester-hours) of work are required for graduation. A "unit" consists of one recitation or lecture period, or one laboratory period a week for one semester. A recitation or lecture period covers fifty minutes; a laboratory period covers, in general, the time of three such periods. In order to complete the course in eight semesters one must take each semester an average of fifteen units of work exclusive of physical education activities.

Grade Points: In order to graduate, a student must not only earn a certain number of units, but also attain an average of at least C grade in all units for which he has registered, or twice as many grade points as units. An explanation of the grading system will be found on page 73.

Residence: A minimum of four semesters in full-time attendance is normally required for graduation. All students are required to complete the final two semesters in full time attendance unless individual exceptions are made by the Classification Committee.

Lower Division Requirements: All students must satisfy the requirements for distribution in the Lower Division as explained on page 76. These requirements should normally be met in the Freshman and Sophomore years, but their completion may be postponed to the Junior year. Postponement to the senior year requires the permission of the Classification Committee.

Upper Division Requirements: In the Junior and Senior years all students must undertake a program of concentration leading to a comprehensive examination or its equivalent. (See page 77.)

Physical Education Activities: Physical Education Activities must be included in the registration of each student every semester, in accordance with the student's classification, until a maximum of six units has been completed. Freshmen and Sophomores register for two activities each semester and Juniors and Seniors one activity. Exemption from this requirement is possible only by permission of the Classification Committee on the recommendation of the College Physician and/or the Department of Physical Education. Transfer students who met the Physical Education requirements of the institution from which they transferred need take only the amount required for their classification.

American History and Institutions: To be eligible for graduation all students are required by the laws of the State of California to pass examinations in American history and in American and California institutions, including the provisions and principles of the United States Constitution and the principles of California state and local government as established under the Constitution of this State. While courses are helpful in preparing for the examinations, it is not possible to satisfy the requirements by the passing of any Pomona College course or courses. Examinations to satisfy these requirements will be given semi-annually in September and in the spring on dates which will be announced well in advance. Each candidate will be examined once without fee, but if he fails to pass the first time, re-examination will be given only upon presentation of a receipt from the Business Office for the payment of the usual \$2.00 fee for special examinations. Candidates who have failed once, however, must take re-examinations at the times scheduled for the regular examinations. These examinations will be objective in character. This requirement must be met not later than the beginning of the junior year, and preferably as early as possible in the student's undergraduate career. Any student who has not satisfied these requirements by the beginning of his junior year will not be considered to be in good standing until they have been fulfilled. Reading lists for those preparing for the examinations are obtainable from the departments of History and Government. Members of those departments will offer a series of public lectures each spring which will be mature interpretations of the subject, but they will not in themselves provide all the factual information necessary to pass the examinations. Students failing an examination are advised to take the course in that field before attempting it again.

Foreign Languages: Although the College does not specify a knowledge of a foreign language as a requirement for the degree, several departments include this requirement in their programs of concentration. The student should ascertain the language requirement of whatever program of concentration he is planning to undertake, and, if he is not already prepared to meet it, should include the study of the required language in his Freshman and Sophomore years.

Graduation Fee: Every student expecting to graduate at the end of a given semester must file an application for graduation at the Registrar's Office not later than the beginning of his final semester and must include the gra

uation fee (\$10.00) with the payment of his other fees at the time of such registration. Failure to comply with these two requirements will automatically exclude a student from graduation that semester.

ACADEMIC REGULATIONS AND PROCEDURE

GRADES AND GRADE POINTS: In order to graduate, a student must earn twice as many grade points as units; that is, an average of at least C grade in all units for which he is registered. Grades and grade points are as follows:

- A (excellent) = 4 grade points per unit.
- B (very good) = 3 grade points per unit.
- C (average) = 2 grade points per unit.
- D (passing) = 1 grade point per unit.
- F (failure) = 0 grade points per unit. May be made up to a D.
- FF (failure) = 0 grade points per unit. May not be made up except by repeating course.
- I (incomplete due to illness)
- W (withdrawn with permission)

All F, FF, and I grades reported by instructors must be accompanied by a specific statement in writing of the reason for the grade. In case of an F or I grade, the statement must include a detailed explanation of how the grade can be made up. A copy of this statement is given to the student. All conditions for removing I and F grades must be met within seven weeks of the beginning of classes of the following semester, except that, in certain year courses, the deficiency in the first semester may be removed by successful completion of the work of the second semester, if the instructor so recommends. An F grade cannot be raised above a D. I and F grades not satisfactorily made up within this time limit automatically become FF.

The I mark is given where illness on the part of a student justifies the granting of additional time for the completion of work. It may be changed to whatever grade the student earns. Instructors wishing to give an I grade for a justifiable cause other than illness must first receive permission to do so from the Classification Committee.

A FF grade can be made up only by repeating the course. Where the FF or permanent F grade is incurred in a Physical Education activity, the same course must be repeated when next offered. A student may not continue in a year course other than Physical Education in which he has received a FF the first semester. The making up of work which has received the permanent F or FF grade does not expunge the grade from the record. Credit and grade points are, however, allowed for the repeated work.

The mark W is used where a student has withdrawn from a course in accordance with the provisions outlined under "changes."

Amount of work: The College regulates the amount of work a student may carry as follows:

The normal registration is 15 units of academic work plus Physical Education activities and/or Military Drill. In addition a student may elect for credit two of the following: Band, Choir, Orchestra, or Play Production.

To register for 17 units of academic work a student must have earned more grade points than the total number of units for which he registered the previous semester; to register for 18 units, 40 more grade points.

To register for less than 12 units of academic work requires the permission of the Classification Committee.

Auditing of Courses: Regularly enrolled students who are paying tuition may, in addition to the courses they are carrying for credit, audit other courses. They should enroll for them through the Registrar's Office. All others must pay the regular auditor's fee, see page 40.

Quality of work: A student is expected to secure each semester twice as many grade points as the total number of units of registration.

Near the end of the first five weeks and near the middle of each semester faculty are required to report all students doing unsatisfactory work for the period preceding the date of the report. In addition to these general reports instructors may make reports at any time concerning individual students who are not in good scholastic standing. Advisers and deans receive such reports and take such steps as are advisable in each individual case.

At the end of each semester a complete report is made on every student. This report becomes a part of the student's record and indicates his standing in the courses for which he has been registered.

The college may at any time require the withdrawal of a student if the quality of his work seems to warrant such action. Decision in every such case is reached by the joint action of the Student Affairs and Classification Committees in consultation with the student's adviser.

Completion of work: To be counted as work completed in the course all papers, reports, drawings, and other assigned exercises must be turned in to instructors before the final examination.

Dismissal from Courses: A student who proves unable or unwilling to carry a course satisfactorily may be dropped from it by the Classification Committee upon the recommendation of the instructor at any time later than six weeks from the beginning of the course. The student's class card, with grade of either FF or W for the course and an annotation reporting the fact of his having been dropped, shall be turned in to the Registrar's Office.

Class Attendance: Students are expected to maintain regular attendance at all class appointments in the courses for which they are registered.

While there is no general college requirement, each instructor has the right to establish such specific regulations regarding attendance as may seem best suited to his particular department.

Final Examinations: Seniors may not take final examinations in courses in the semester in which they take their comprehensive examinations. Final examinations are required of all other students in all subjects save as exceptions are made by action of the Courses of Study Committee.

The schedule of final examinations is prepared by the Courses of Study Committee. No changes of examination dates may be made without the consent of this Committee. Examinations for individual students may be given at other than scheduled times only by consent of the Classification Committee and on the presentation to the instructor of a Business Office receipt for a fee of two dollars (\$2.00), unless this fee is remitted by the Committee.

Field Trips: Field trips are looked upon by the faculty as a legitimate part of certain courses. Permission for such trips is secured by instructors from the Courses of Study Committee at the opening of each semester. Instructors certify to the Registrar's Office the names of students participating in these trips.

Pre-Registration and Registration: On appointed days shortly after the publication of the catalog in the spring and before Christmas vacation in December all students must pre-register by filling out schedules listing their choice of subjects for the following semester. The fee for any change in this pre-registration is three dollars.

New students pre-register and register on announced days at the opening of each semester.

Registration is completed for all students by the payment of tuition and fees on appointed days at the beginning of each semester.

The fee for late pre-registration or late registration is \$2.00 for the first second day following the appointed days, and \$1.00 additional for every day thereafter to a maximum of \$10.00.

Students are not allowed credit for courses for which they are not formally registered.

Students may not enter courses later than two weeks from the beginning of class work.

Changes in Registration: Upon application to the Registrar's Office and with the approval of his adviser, a student wishing to modify his schedule of studies by addition or substitution of courses may do so within two weeks of the beginning of class work. All students except those registering for the first time are required to pay a change fee of three dollars. No change of registration is official unless the student has complied with the procedure established by the Registrar's Office.

Students withdrawing from laboratory fee courses within three weeks of the beginning of classes will be refunded the full fee. One-half the full fee will be refunded to those withdrawing in the following three-week period. After six weeks from the beginning of classes no laboratory fees will be refunded.

A student may withdraw from a course within six weeks following the beginning of class work by following the procedure prescribed by the Registrar's Office. Thereafter, the dropping of a course by a student shall entail for him a grade of FF for the course, except as circumstances may, in the judgment of the instructor and the Classification Committee, warrant a grade of W.

Matriculation: Matriculation implies the proven ability to carry college work. To this end the standing of all students is provisional until after they have been in full time attendance for one semester. At that time those not matriculated are those students who have shown themselves in accord with the standards of the College, have carried a minimum of 12 academic units, and have maintained at least an over-all average of C in all work attempted during their term of residence. For those matriculating at the end of their first semester a public matriculation ceremony is held early in the second semester.

Students failing to matriculate at the end of their first semester of residence may be matriculated at the end of any subsequent semester provided they have met all the above requirements including an over-all average of C in all work attempted during their whole period of residence.

Students are not candidates for a degree until they have matriculated.

The Faculty Regulation on English: In the evaluation of all academic exercises the quality of English used by the student will be weighed together with the soundness and completeness of his thinking. Faculty members are expected to report to the Faculty Committee on English all students whose use of English is unsatisfactory. On the recommendation of this Committee a student whose English is persistently unacceptable may be required to withdraw from the College at the end of any semester by the joint action of the Student Affairs and Classification Committees. Habitual and flagrant misspelling is considered a deficiency in English to which this regulation applies.

REQUIREMENTS FOR DISTRIBUTION IN THE LOWER DIVISION

All students must satisfy, by the end of the Junior year, the following requirements for distribution in the Lower Division. Normally the distribution requirements shall be met only by the Pomona College courses listed below unless exception is granted by the Classification Committee. Students from other institutions who plan to transfer to advanced standing in Pomona College are advised to scrutinize their programs carefully to be sure they have taken the required work and to consult the Registrar concerning any questions as to the acceptance of credit.

1. *English 1a, 1b.* An Introductory Course. A few students who make exceptionally high scores on the College Board Examination and also on an exercise in composition set by the Department of English are exempted from *English 1a and are enrolled in English 1b in the First Semester.* If they wish, such students may take the *year* course, which is a study of composition and literature on the college level. Remedial work in English below the college level is under the supervision of a special faculty committee.

2. *A year course in a biological science.* Biology 1, Botany 12 and Zoology 1 or 11.

3. *A year course in a physical science:* Astronomy 51; Chemistry 51; Geology 1 and 2; Physics 1; Physics 51.

Note: A student may satisfy the requirement in either Group 2 or Group 3, but not in both, by offering for admission a recommended unit of high school work in one of the sciences listed in the Group from which he wishes to be excused.

4 and 5. *Two year-courses in the social sciences:* History 1a-1b; Economics 1 and 52; Government 51 and 52; Sociology 51 and 52; Education 53; Economics 51 and Government 52. Normally History 1a-1b will be taken as one of the two courses.

Note: Sociology 51 and 52 constitute the integrated year course in sociology for students who expect to take only one year of sociology. For students planning more extensive work in sociology, Sociology 51 and any two higher-numbered semester courses will meet the year course requirement.

6. *A year course in literature, art or music:* This requirement may be met by a course primarily concerned with the appreciation of literature rather than with the mastery of language, or by a year course in art or music. Acceptable courses are:

- a. English 50 or six units from English 50a, 56, 57, and 58.
- b. French 51 and 81, German 53, Latin 57, Spanish 71 and 91.
- c. In the classics and in modern European languages, any course, in the original or translation, numbered above 100, except courses in composition and conversation.
- d. Any year course of not less than four units in art or music.

7. *A year course in philosophy or religion:* Philosophy 57, 110 and 111, Religion 1, 2; 65.

REQUIREMENTS FOR CONCENTRATION IN THE UPPER DIVISION

ALL STUDENTS must make a tentative choice of a major field of concentration during the Freshman year and a definite choice by the end of the Sophomore year. During their first two years students will be expected to complete the basic courses required by the department or departments of their choice.

Each student's program of concentration shall culminate in a final written comprehensive examination over the entire field in which he has concentrated. The student must pass this examination in order to qualify for graduation. In a few departments research projects take the place of the written examination.

No student is permitted to take both the Comprehensive Examination and final examinations in courses the same semester.

The Comprehensive Examinations must be taken at the officially scheduled times. Students who have failed Comprehensive Examinations may request permission to retake them at the opening of the college year and at the end of each semester. Such applications must be in the hands of the department concerned by September 1, December 1, or April 1. A fee of \$10 will be charged for a re-examination which is taken at other than the times set for a regular comprehensive examination. All students who intend to take the

regularly scheduled comprehensive examinations must file an application with the Registrar not later than the beginning of the semester in which the examination is to be taken.

In the event that an undergraduate does not take all or part of his Comprehensive Examination due to illness, he will receive an "I" for the part or parts of the examination not taken.

It is the responsibility of the undergraduate who does not take a Comprehensive Examination due to illness to inform the department giving the examination at the earliest possible time.

The "I" given for the part or parts of the examination not taken may be removed in the manner prescribed in the Pomona College Catalog. For Comprehensive Examinations not taken at the end of the Second Semester the summer vacation period may be used for make-up examinations provided arrangements can be made which are satisfactory to the department concerned and to the undergraduate taking the examination. Only in the most exceptional circumstances will make-up Comprehensive Examinations be given during final examination periods. Make-up Comprehensive Examinations may not be given during such periods except by specific permission of the Classification Committee.

A program of concentration leading to the comprehensive examination must include not less than twenty-four hours and not more than thirty-six hours of work in courses numbered over 100 in the chosen field. These limits apply to that part of the student's program on which the comprehensive examination will be set. For the entire four years of college, not more than a total of fifty-two units in any one department (in Music not more than a total of sixty units) may be counted toward graduation.

A few concentrations have been arranged so as to permit a combination of courses in various departments. In many cases concentration will also be preparation for professional study or other specialized training after graduation.

For concentration in some fields a reading knowledge of at least one modern foreign language is necessary; in many fields a command of two is desirable. It is to the advantage of the student to acquire as much as possible of this reading knowledge before entering college, and whatever additional training is needed should be taken early in his college course.

The requirements for concentration in any department will be found before the list of courses offered by the department. The several programs of concentration in fields consisting of related courses in more than one department follow immediately.

Concentration In Special Fields

IN ADDITION to concentration programs in the various departments, the following programs in special fields are available:

INTERNATIONAL RELATIONS

THIS PROGRAM is designed for students having an interest in the political, economic and cultural aspects of international relations as well as for those contemplating careers in diplomatic service or foreign commerce. All those electing this area of concentration are required to have a reading and some speaking knowledge of at least one modern foreign language. Some evidence of ability to use the language chosen (French, German, Spanish, Chinese, or Russian) must, except in the case of Chinese, be submitted to the program adviser by the beginning of the junior year, and the language examiner concerned must certify the competence of the student in that language not later than the close of the first semester of the senior year.

Prerequisites: History 1, 55; Government 51 and 52; Economics 51 and 52; and a modern foreign language as indicated above.

Lower-division recommendations: Sociology 51; Psychology 51; Statistics for Social Scientists (Economics 57).

PROGRAM OF CONCENTRATION

A minimum of 30 upper-division units as follows: Modern European History (History 113a, 113b or equivalent), Comparative Government (Government 125, 126), American Foreign Relations (Government 165), International Politics and Organization (Government 167), Money and Banking (Economics 103), International Trade (Economics 115), International Finance (Economics 155), and 3 additional units to be selected in consultation with the adviser. In making these elections students are urged to consider the relevant courses available in the fields of Sociology, Latin-American Affairs and Oriental Affairs.

For the exceptionally promising student a program of honors study in International Relations can be arranged. The specific requirements beyond the requisite grade point average may be met by six units covering Government 165 and Government 167 and

by six units of advanced reading and directed research culminating in the presentation of a thesis.

Junior Transfers: Students transferring to Pomona at the beginning of the junior year are eligible to concentrate in International Relations provided the prerequisites are met before entrance or can be satisfied in the junior year.

FOREIGN AREA AND LANGUAGE CONCENTRATION

EAST ASIA AREA CONCENTRATION

POMONA COLLEGE has one of the best oriental libraries on the Pacific Coast, affording excellent resources for students concentrating on East Asia.

Requirements: A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year's work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Philosophy 126.

Recommendations: It is advisable for a student concentrating in this field to have at least the following introductory courses in certain related fields: Government 51 and 52; History 1 and 2; Economics 51 and 52; Sociology 51. These should normally be taken in the freshman and sophomore years. Some students will wish to add, in their junior and senior years, Economics 115; Government 167; History 114; Sociology 110.

It is also highly desirable for students studying China intensively to have some work in the Chinese language, three years of which (Oriental Affairs 52, 151, 181) are offered.

Because several of the above required courses are offered only in alternate years, students concentrating in this area should plan their course programs well ahead.

LATIN AMERICAN AFFAIRS

CONCENTRATION in Latin American Affairs is possible in connection with the concentration in International Relations, see page 79. Concentration on Latin America is designed for students looking toward teaching Latin American history, economics, etc.; toward government service in Latin America; toward a business career in

Latin America. Students interested in this field should consult with Mr. Herring or Mr. Crowell.

MODERN SOCIAL INSTITUTIONS

For students whose needs and interests would be better served by a program of study somewhat broader than in a normal major, Pomona offers a concentration in Modern Social Institutions drawing upon the courses of several departments.

Administered by the Department of Government, it enables a student to pursue a course of instruction having for its focus the institutional life and social problems of the American people. Programs in this field include (1) certain specified courses in the social sciences; (2) in the first semester of the junior or senior year a seminar on the development of American political ideas and institutions; and (3) in the second semester of the junior or senior year a reading-discussion course emphasizing institutional interrelationships. Both (2) and (3) are designed to give unity to the concentration. The work in the seminar and reading course culminates in a paper which is counted as a part of the comprehensive examination.

Students electing this concentration must offer 36 units of upper division work, not less than six nor more than 15 of which should be earned in each of two fields. In each case, however, the following core courses must be included (prerequisites being assumed): History 55 (History of the United States); Economics 189 (Public Finance) *or* 111 (Labor Economics); Education 105 (History of Education: United States) *or* 151 (Introduction to the Philosophy of Education); Religion 142 (Christianity and Modern Society) *or* 160 (Catholicism and Protestantism); Sociology 109 (Marriage and the Family) *or* 112 (The American Community); Government 180 (Comparative American Institutions) *and* 181 (American Political Thought). In addition, one advanced course (3-6 units) in the history, culture and institutions of an area other than the United States or in American foreign relations is required.

In arranging his program of concentration the student, in consultation with his adviser, may select the appropriate number of units from offerings in Economics, Education, English, Government, History, Philosophy, Physical Education, Psychology, Religion, and Sociology.

Pre-Professional Programs

THE academic program of Pomona College furnishes the opportunity for pre-professional training in many fields. Indicated below are suggested programs which might be combined with various concentrations.

PRE-AGRICULTURE, PRE-FORESTRY, AND PRE-LANDSCAPE ARCHITECTURE

A STRONG PROGRAM IN THE NATURAL SCIENCES is the best preparation for agriculture or forestry and, coupled with an equivalent program in art, for landscape architecture. The courses necessary for programs in these fields are available at Pomona College. A complete list of recommended courses in all three may be obtained from the Department of Botany, and the suggested course in landscape architecture from the Department of Art.

Ordinarily preparation in agriculture, forestry, or landscape architecture involves a full four-year course of background material together with a broad general education. This is followed by a year in a graduate or technical school bridging the gap between pure science or art and their application. Such a program prepares for leadership in the field, rather than a minor position involving only a special application of a segment of the subject. It is designed to develop adaptability to many situations rather than specific preparation for a few.

PRE-BUSINESS COURSE

RECENT EVIDENCE reveals that the tendency for business executives to come from the social sciences, particularly economics, is growing. Modern management needs to know much besides the particular facts and skills associated with an individual business. A thorough understanding of the economic system and business-government relations, along with the power to communicate accurately and convincingly, is more and more becoming a prerequisite to business success.

Students at Pomona College, planning a career in business, have the opportunity to develop to the fullest their own individual capacities while gaining a mature understanding of economic institutions and the broader relations within which a business firm operates.

Training in the basic tools of analysis required by professional leaders is emphasized. These include the ability to think clearly, to state one's position precisely and persuasively, and to know where to find wanted information.

A rich offering of courses is available, including accounting, statistics, money and banking, labor economics, national income, economic theory and business policy, trade regulation, business law, taxation, international trade, and international finance. During the senior year, the student is urged to take honors work or supervised study in the area of his own special interest under the direction of a staff member. The program is ideal for the student who plans to attend a graduate school of business, to pursue an advanced degree in economics, or to enter one of the special business training programs for college graduates.

This program at Pomona College is now within reach of any student who has the requisite ability, character, and initiative. In addition to the Baker, Alumni and other scholarships, three four-year Union Carbide fellowships covering full tuition, fees, and books are now available annually to incoming freshmen who plan on business as a career. In addition, the Morris B. Pendleton Foundation insures that any deserving economics major will not be prevented from completing the program because of need. See "Scholarships and Student Aid."

PRE-ENGINEERING PROGRAM

AS THE ENGINEERING profession has assumed a more important role in modern society, there has been a growing demand for professional engineers who have, in addition to technical ability and training, a broad understanding of the economic, social, and political forces which are molding modern civilization. Recognition of these requirements for the modern engineer may be found in liberalized curricula of leading engineering schools.

Students at Pomona College who plan to enter a professional engineering school have an opportunity to obtain an excellent foundation in mathematics and physical science in addition to a well-balanced liberal training. While no professional engineering courses are offered at Pomona, and no engineering degree is granted at Pomona, it is possible in some cases for students to enter a graduate school of engineering after being graduated from

Pomona with a concentration program in physical science. Those who plan to continue with engineering training after leaving Pomona should consult with members of the staff in physical science who are acquainted with engineering school requirements.

COMBINED PLAN WITH MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ALONG WITH SEVERAL other liberal arts colleges, Pomona has an arrangement with the Massachusetts Institute of Technology whereby qualified students may receive the Bachelor of Arts degree from Pomona and a Bachelor of Science degree from M.I.T. after a combined five-year program, of which the first three years are taken at Pomona. Ordinarily, at least six years would be required to complete the work for both degrees. Students under the combined plan will be accepted at M.I.T. without examination if recommended by Pomona.

A pre-engineering concentration may be completed by students who transfer to the Massachusetts Institute of Technology under the Combined Plan after three years at Pomona College and by students who complete four years at Pomona College.

In addition to satisfaction of the Lower Division Distribution requirements of the College, the following Lower Division courses should normally be completed:

Physics 51	Engineering Drawing 40ab
Mathematics 1 or 52	Chemistry 1
Mathematics 65	Chemistry 59
Engineering Drawing 7ab	

Satisfaction of the Pomona College concentration requirement in pre-engineering for those students who transfer to MIT at the end of the junior year shall include at least 24 Upper Division units selected from the following courses in consultation with the Faculty advisor. Starred courses shall normally be included.

Mathematics 151a*, 151b	Physics 141a*, 141b
Mathematics 125*	Physics 142a*, 142b
Mathematics 185	Physics 153
Physics 110*	Physics 154
Physics 113a*, 113b	Physics 155

Students planning MIT programs in specialized fields such as chemical engineering, architecture, food technology, and city planning will approximate the above requirements on a unit basis but with substitution of more suitable courses where deemed advisable after consultation with the Faculty advisor.

Those students concentrating in pre-engineering and who plan to graduate after four years at Pomona College shall complete 36 units in Upper Division courses selected from the above list and from the additional list below:

Mathematics 118

Mathematics 119

Mathematics 210

Physics 156

Physics 191

PRE-JOURNALISM TRAINING

ON THE RECOMMENDATION of graduate schools of journalism and of distinguished journalists, students planning a career in journalism are advised to concentrate in any principal field of study, to secure broad and liberal education, and to improve their mastery of the art of writing. Courses in the social sciences, literature, the arts, and foreign languages are strongly recommended. Study in the natural sciences is often desirable, and for some kinds of journalistic work concentration in one of the sciences is advisable. General training in accurate observation and reporting is an important part of all writing courses: English 1, 60, 63, 64, 111, 151.

PRE-LAW PROGRAM

ADEQUATE PREPARATION for the study and practice of law requires the completion of an undergraduate program in the liberal arts leading to the baccalaureate degree. Concentration in government, economics, or history is recommended though not to the exclusion of appropriate courses in other fields.

Students intending to attend a law school following graduation should keep in mind that the best preparation for such professional study is a thorough education in the liberal arts. Lawyers and law teachers agree that the ability to communicate, the ability to write and speak with clarity and precision, is of paramount importance. A broad foundation in government, economics, and history is essential; accordingly if the student concentrates in one of these he should be sure to supplement his choice with numerous courses in both of

the other fields. Particularly recommended are: introduction to law, constitutional law, American history, expository writing, accounting, English history, public finance, money and banking, industrial competition and public policy, political philosophy, logic, statistics, and psychology.

Several law schools have made careful studies and recommendations regarding pre-law school education. These should be consulted through one of the advisors serving on the Pre-Law Committee. He should also be consulted regarding the Law School Admission Test which is administered every year by the Pre-Law Committee and which is required by practically every major law school in the United States.

PRE-LIBRARY TRAINING

BROAD GENERAL TRAINING and specialized knowledge in a subject field are essentials for students planning to become librarians. The ability to use the typewriter with accuracy and speed, and a reading knowledge of at least two modern foreign languages are usually prerequisites to admission to a library school. All librarians will find a knowledge of statistical methods useful. Those who intend to go into public library work ought to have an understanding of the organization and problems of government, municipal government particularly, while those aiming at the college and university field must have a good background in the history and theories of higher education. Students expecting to take up public school library work in California are required to complete nine hours in education. Although it is not a prerequisite, actual experience in a library is a distinct advantage.

While concentration in pre-library training is not offered, students looking forward to work in this field are strongly recommended to take the following courses: English 101 or 103, 105; History 113 or 103 or 107; six hours of advanced work in Philosophy, Psychology, or Foreign Languages. Other recommended courses include Education 104, Psychology 107, Art 51, Economics 57, Philosophy 55, Comparative Literature 181.

PRE-MEDICAL COURSE

CERTAIN SUBJECTS have been designated by the Council on Medical Education of the American Medical Association as minimum

requirements for entrance to medical colleges. Many of the leading medical colleges, however, have requirements well beyond this minimum, and are selecting only those who are best prepared and have demonstrated the highest scholastic ability and laudable personal traits. Pre-medical students are advised not to attempt to crowd the minimum requirements into three years of college work, but to build, in more leisurely fashion, a broad educational foundation. Breadth of view, culture, and a thorough grounding in the biological and physico-chemical sciences are the objectives of the pre-medical course. It is important to note that these objectives are stressed by all medical colleges and are playing an increasingly important role in shaping their policy of admission.

Below is outlined a curriculum which meets the requirements for graduation from Pomona College and the entrance requirements of most of the medical colleges in the United States. It can readily be modified, as regards both science and non-science courses, to meet the specific requirements of any medical college and the special needs of individuals. During the last five years the percentage of Pomona students admitted to medical schools has been well over double the national average.

REQUIREMENTS FOR CONCENTRATION

Lower Division Courses: Zoology 1; Chemistry 1, 59; Physics 1; Foreign Language, German preferred.

Upper Division Courses: Zoology 117, 137; Chemistry 106, 110a, 111a, and additional units selected from upper division physical or biological science courses for which prerequisites have been met to make a minimum of 24 units.

SUGGESTED COURSES

FRESHMAN YEAR: English 1; Chemistry 1; Zoology 1; History 1.

SOPHOMORE YEAR: Chemistry 110, 111; German 1; Zoology 117. Electives from literature, art or music; philosophy or religion.

JUNIOR YEAR: Chemistry 59, 106; Physics 51; German 53. Electives from social sciences.

SENIOR YEAR: Zoology 137.

Most medical colleges require a reading knowledge of either French, German or Spanish, with a preference for German.

Students planning to study medicine should anticipate these requirements by taking some language in high school with the view toward completing at least one year in college. Also, students will find it advantageous to take trigonometry in high school. In addition students should consult with their adviser to determine the proper time to take the Medical College Admission Test, taking of which is an entrance requirement of most medical colleges.

Students interested in pre-nursing should consult the Zoology Department.

TEACHING AND EDUCATIONAL ADMINISTRATION

IN CALIFORNIA EVERY public school teacher must have a certificate. This is issued by the county in which the teacher is employed upon presentation of a credential granted by the State Board of Education.

California requires students who wish a secondary credential to complete a bachelor's degree and one year of graduate work. While California permits the fulfillment of elementary credential requirements in the usual four-year undergraduate program, several California colleges and universities consider a graduate program as desirable for elementary as well as secondary teachers. Pomona College is one of these institutions and its elementary credential program is, therefore, organized on a five year plan. The fifth year may be taken at the Claremont Graduate School (one of the Associated Colleges at Claremont) which is authorized to recommend candidates for most of the general and some of the special teaching credentials, or at any other college accredited by the State for teacher education. (Appropriate program planning well in advance will permit the completion of the elementary credential requirements with one summer and one semester of graduate work.)

For the *secondary* credential, California requires collegiate preparation in two fields commonly taught in the secondary schools: a "teaching major" representing 36 units and a "teaching minor" representing 20 units. These two fields must be selected from the following: social studies, life sciences, physical sciences, English, speech, language arts, foreign language, mathematics, and health education; or from the special fields of agriculture, art, business

education, homemaking, industrial arts, librarianship, music, and physical education. Students majoring in areas not offered in secondary school curricula must present two "teaching minors." Thus, most prospective secondary school teachers will concentrate at Pomona College in the area or areas they expect to teach.

Students preparing for the *kindergarten-primary* or *elementary* credential are not required to present a specific teaching major. The concentration in education is especially designed to serve prospective elementary teachers, but several other concentrations are acceptable such as, psychology, art, music, physical education. The program for concentration in education is described on page 117.

Inasmuch as requirements vary considerably for different credentials, and for the various graduate schools of education, students who expect to enter the profession of teaching either in California or elsewhere should consult the Education Department before registration concerning these requirements.

PRE-THEOLOGICAL TRAINING

STUDENTS PLANNING to prepare themselves for Seminary or Divinity school training, with a view to entering the parish ministry or college teaching in religion, are advised to secure a well-rounded college education. They could most profitably fulfill their requirements for concentration in one of the following departments: English, History, Philosophy, Psychology, Religion, or Sociology; or in the trans-departmental program in Modern Social Institutions. In any event, the total program for such students should include all of the following as a minimum breadth of preparation: Four semester courses in English (composition and literature); four semester courses in foreign language; two semester courses in philosophy; two semester courses in natural science; six semester courses in social science, including at least two courses in history, one in economics, one in sociology, and one in social psychology; and six semester courses in religion, including Religion 1, 2 and 65. It is also recommended that such students, regardless of field of concentration, consult as early as possible with a member of the Department of Religion with respect to the broad outlines of their contemplated undergraduate programs.

Students planning to prepare themselves for Seminary or Divin-

ity School training, with a view to entering the field of religious education, are urged to concentrate in religion in their undergraduate studies.

SOCIOLOGY

SOCIAL WORK. Students who plan to follow social work as a profession should attend a graduate school of social work, though in many counties in California (as well as in other states) they can go directly into social work with only a B.A. degree. The expansion of social services in recent years has created a heavy demand for social workers, but the counties with high standards accept only workers with at least one year of graduate training. Also, one seldom advances to the higher administrative positions without such training.

The best undergraduate training for students expecting to enter graduate schools of social work is a broad liberal arts education, with special emphasis upon the social sciences such as the sociology concentration provides. Introductory statistics and psychology should be included, also Economics 111 and Government 103 will be found useful. Those planning to work in the Pacific Southwest should learn to speak Spanish.

SOCIAL RESEARCH. There is considerable demand for research workers in government agencies—federal, state, and local—as well as in private foundations. Usually at least a master's degree is required, including a knowledge of statistical method. The regular undergraduate concentration in sociology will prepare one adequately for entrance into graduate school, for which there are many scholarships and fellowships available for able students.

TEACHING. Students preparing to teach sociology should follow the regular sociology concentration. A master's degree is usually essential for teaching in high schools and junior colleges, and a doctor's degree for teaching in colleges and universities. Graduate scholarships, fellowships, and teaching assistantships are available in a good many universities for outstanding students.

Honors Study

Honors study is aimed at a deeper and more scholarly grasp of the student's chosen field than is customary; it is also aimed at broadening his intellectual life by the discovery and exploration of topics relevant to the special subject of inquiry. Students who show the capacity and the inclination for more than average intellectual achievement may be permitted during their Junior and Senior years to enroll for honors study.

An honors program frees the student's energies by allowing him, through a flexible use of instruction and courses of study, to spend a considerable portion of his time in independent study. Released from as much academic routine as his instructors may approve, an honors candidate thus assumes responsibility for a more profound and wider knowledge than is expected of the ordinary student. He will be admitted to honors status only upon the basis of a record which shows promise of competency to carry on work of high quality; he will be continued only if he exercises initiative and self-direction, places scholarship consistently first among his interests, and maintains a high standard of scholarship in his honors program as well as in his other work.

CONDUCT OF PROGRAMS

General administration of honors work is vested in the Courses of Study Committee, which reviews the programs of honors study planned by departments, divisions, or inter-divisional committees and administers the faculty regulations pertaining to them.

Eligibility: A minimum academic grade-point average of 3.0 is ordinarily a requirement for enrollment in honors study. Aside from this requirement, the eligibility of a student for honors status is determined by the department or division in which he will work.

Hours: The number of hours allotted to honors study must be not less than twelve and not more than eighteen. Within the limits of these hours a student may be excused from formal classes. The method of honors study varies in the divisions: it may be carried on in seminar or laboratory projects, or it may consist of independent study or creative work.

The general requirement limiting to a total of fifty-two units the work which may be taken in one department applies also to honors

programs. The comprehensive examination in an honors program however, may cover a greater area than does the Senior comprehensive examination required of all students.

Application: Application for enrollment should normally be made at the end of the Sophomore year. The application form obtainable at the Registrar's office, must include a statement of the program which the applicant intends to follow and must be approved by the faculty member in charge of the program. For detailed information concerning divisional and departmental programs the student should consult members of the department or division in which he would like to undertake honors study.

Withdrawal: A student may withdraw from honors status at his own request with the approval of the division concerned. In case the performance of a student falls below a standard of high quality either in his honors work or in his courses, he may be withdrawn from honors status either by the division or by the Courses of Study Committee.

Examinations: Evidence of the success of the student in his honors work is measured by written and oral examinations administered toward the close of the Senior year. Normally all or part of the Senior comprehensive examination in a field of study will form a part of the honors examination in that field. With regard to his ordinary courses the student is subject to the requirements normally pertaining to them. He may be exempted at the discretion of the instructors concerned from taking course examinations within the field of his honors program.

A student's performance in his honors examination and in all other work required for the completion of his honors program is judged by the department or division in accordance with procedures approved by the division, or, in some instances, by an inter-divisional committee with the approval of the Courses of Study Committee. A student who has maintained in all his work a grade point average of 3.0 and who has met successfully all the requirements of his program of honors study will be graduated with notation of that accomplishment. He will be eligible also for general commencement honors described below. A student who fails to meet the standards of his honors program but who in his honor

Students who complete work worthy of credit will be recommended by the Courses of Study Committee for graduation in course (*rite*).

COMMENCEMENT HONORS

Pomona College awards the distinctions *cum laude*, *magna cum laude*, and *summa cum laude* to graduating seniors who have distinguished themselves in the over-all average of their work and in the senior comprehensive examination.

GRADUATE WORK IN THE CLAREMONT GRADUATE SCHOOL

Graduate work in history, oriental affairs, Latin America, political economy, psychology, literature, philosophy, the biological and physical sciences, and the fine arts and music, along with professional work in public school education and psychology, is conducted by the Claremont Graduate School, whose faculty includes members of the staffs of Pomona College, Scripps College, and Claremont Men's College, as well as its own appointees. A catalog will be furnished upon request to the Dean of the Claremont Graduate School, Harper Hall, Claremont, California.

GRADUATE RECORD EXAMINATION

ANY OUTSTANDING graduate or professional schools require or request that applicants for admission, as well as for fellowships and scholarships, take the Graduate Record Examination administered by Educational Testing Services, the national academic testing organization. The Graduate Record Examination tests general knowledge in the fields of study covered by the Pomona College curriculum and does not require special preparation. Students who intend to enter graduate or professional schools are advised to write early in their senior year directly to the Educational Testing Service, Box 9896, Los Feliz Station, Los Angeles 27, California.

Courses of Instruction

ELEMENTARY courses numbered below 50 are designed primarily for the freshman year. Courses numbered 50 to 99 are either those which follow the lower course or are the most advanced beginning courses. Courses numbered over 100 are for juniors and seniors and may not be entered by students without previous work in the same field, except by written permission of instructors. Courses numbered NC carry no academic credit. In some departments a definite sequence of courses must be followed. The hyphen in a course number designates that credit will not be allowed for only one semester of the year course. When course numbers are connected by a comma, credit is given for a single semester, but unless a passing grade has been received for the first semester of the course entrance to the second semester is by permission of the instructor.

Any course may be withdrawn if the enrollment is less than five.

Except by special permission, credit for only one unit of work in a department is not allowed.

COURSES IN THE ASSOCIATED COLLEGES

Following the departmental offerings of Pomona College are listed certain courses in Scripps College and Claremont Men's College open to Pomona sophomores, juniors and seniors under approved conditions. Normally only those courses so listed are open to Pomona College students. It should be noted that most of the Scripps College courses are year courses and consequently credit cannot be allowed for only one semester. To enroll in courses other than those listed, students must first obtain a permission slip from the chairman of the corresponding department at Pomona. Every regular student in residence in Pomona College shall, however, select not less than half of his registration each academic year from courses in Pomona College. Normally freshmen will take the entire programs of study in the college of their residence. In a few departments involving the use of physical equipment and laboratory space, such as art and the sciences, it is necessary to impose limitations on the exchange privileges.

Certain graduate courses in the Claremont Graduate School are also open to Pomona seniors who are concentrating in the field.

which the courses are offered. Short titles for these courses are given following departmental offerings. For fuller description consult the catalog of the Claremont Graduate School. Permission to enroll in graduate courses must be secured from the chairman of the department in which the senior is concentrating and from the instructor giving the course.

Where a course in Scripps, Claremont Men's College, or the Graduate School duplicates the material of a Pomona course, credit will not be given for both.

DIVISIONS

The courses in the Pomona College curriculum are arranged in three divisions as follows:

DIVISION I [*Humanities*] Art, Chinese, Classics, Comparative Literature, English, German, Music, Philosophy, Romance Languages, Russian, Speech and Dramatics.

DIVISION II [*Natural Sciences*] Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Military Science, Physics, Psychology, Zoology

DIVISION III [*Social Sciences*] Economics, Education, Geography, Government, History, Oriental Affairs, Physical Education, Religion, Sociology

Art

Free types of concentration are open to students of art within the department: Painting (including Drawing and Design), Sculpture, and Art History. Specialization may be determined in the second year, but correlation between practice of the two and three dimensional arts and historical and aesthetic study is maintained.

A sense of design and an appreciation of and ability to render form must be exhibited in the basic courses as the foundation for further specialization. The student will be expected to present his work in the Department Exhibition at the end of each year. A comprehensive examination is required of all candidates for the Bachelor of Arts degree.

For each unit of credit in Applied Art, there is required a minimum of one hour of assigned reading and two hours of studio work per week. Students are urged to prolong these periods when other work permits.

The total number of hours of Applied Art accepted toward graduation is also distributed as not to exceed 16 hours in courses numbered under 100. In courses where lecture and laboratory work are combined, the work is counted half theory and half applied.

CONCENTRATION REQUIREMENTS

In addition to the required courses listed in the concentrations described below, sufficient courses to complete a total of 24 units of upper division work are to be chosen from Upper Division Electives with the consent of the chairman of the department.

PAINTING

Lower Division Requirements: Art 3, 9, 51, 61.

Upper Division Requirements: Six units of upper division art history, 120, 185.

Upper Division Electives: Art 105, 178, 185, or Scripps II-121, II-122, II-123, II-130, II-141.

SCULPTURE

Lower Division Requirements: Art 3, 9, 51, 65.

Upper Division Requirements: Six units of upper division art history, 162.

Upper Division Electives: Art 105, 120, 178, 185, or Scripps II-121, II-123, II-130, II-141.

ART HISTORY

Lower Division Requirements: History 1, Art 3, 9, 51.

Upper Division Requirements: Nine units of upper division art history and 178 a or b.

Upper Division Electives: Art 105, 110, 118, 120, or Scripps II-121, II-122, II-123, II-130, II-141.

SPECIAL PROGRAM

WITH APPLIED ART TAKEN AT SCRIPPS COLLEGE

Lower Division Requirements: History 1, Art 51, Art II-2, and one of the following: Art II-21, II-22, II-23 or II-30.

Upper Division Requirements: 6 units of upper division European or Oriental History, 9 units of Art History at Pomona College, 18 units of Applied Art at Scripps College.

3a-3b. DESIGN. *Mr. Grant.* A basic course investigating the fundamentals of design as applied to painting and drawing. Tempera and Casein will be the primary mediums for class work. Two units. Two sections. MW, 10-11 MW, 1:15-3:15.

9a-9b. SCULPTURE. *Mr. Lawler.* A basic course in sculpture, comprising study of the nature of form. Forms, both abstract and realistic, will be constructed in a variety of media. 2 units. Two sections. TTh, 1:15-3:00 TTh, 3:15-5:05

51a-51b. SURVEY OF THE HISTORY OF ART. *Mr. Slive.* A study of the historic development of art with special attention to an analysis of the works examined. First semester: From the prehistoric period through the Gothic era; second semester: From the Renaissance to the contemporary scene. This course and its equivalent is normally a prerequisite for advanced courses in the history of art. 3 units. MWF, 11.

102a, 55b. ANCIENT ART AND ARCHAEOLOGY. *Mr. Carroll.* A survey of the arts of Greece and Rome, in reference to the life of both countries and to neighboring civilizations (Egyptian, Near Eastern, Italic, Etruscan, etc.). The first semester will cover Greece, from the prehistoric Minoan-Mycenean culture to Alexander the Great. Hellenistic Greece, Rome and the Roman World are reserved for the second semester. 3 units. *TThS, 10.*

102a, 61b. FIGURE DRAWING AND GRAPHIC DESIGN. *Mr. Grant.* The rendering of form with emphasis on the development of the student's drawing ability. 2 units. *TTh, 9-11.*

102a-65b. ADVANCED SCULPTURE. *Mr. Lawler.* Continuing study of the nature of form. Work from the model, modeling in relief. Consideration of sculptural techniques and materials. 2 units. Two sections. *TTh, 1:15-3:05; Th, 3:15-5:05.*

102a, 105b. ADVANCED FIGURE DRAWING AND GRAPHIC DESIGN. *Mr. Grant.* 2 units. *TTh, 9-11.*

102a, 110b. MEDIEVAL ART. *Mr. Schardt.* First semester: Early Christian and Byzantine art, 3rd century to 7th century; Carolingian Renaissance, 8th and 9th centuries; Romanesque art, 950 to 1150. Second semester: Early Gothic, 1150 to 1200; Hohenstaufen art, 1150 to 1250; High Gothic, 13th and 14th century; Late Gothic in the North, 15th century. 3 units. *TThS, 8.*

102a, 113b. ART FROM 1700. *Mr. Slive.* A study of the principle trends and individual masters in art from the rococo period to the present day. First semester: From Watteau to Delacroix; second semester: From Daumier to the present. 3 units. *MWF, 9.*

102a, 118b. SOUTHERN RENAISSANCE AND BAROQUE ART. *Mr. Schardt.* A study of architecture, sculpture, painting and applied art in Italy from the 14th century to the middle of the 18th century. The second semester will include a study of 16th and 17th century Spanish painting. 3 units. *TThS, 9.*

102a, 120b. PAINTING. *Mr. Grant.* Practice in still life, landscape and figure painting investigating various techniques and mediums. 2 units. *T or Th, 1:15-4:05 and arranged.*

102a-162b. CREATIVE SCULPTURE. *Mr. Lawler.* A course open only to advanced students of ability for the development of original problems in various media. (May be repeated.) 2 units. Two sections. *TTh, 1:15-3:05; Th, 3:15-5:05.*

102a, 178b. PROBLEMS IN THE HISTORY OF ART. *Mr. Slive.* The study of a particular artist, period, school or movement in art or art theory. Offered primarily for majors. 3 units. Arranged.

102a, 185b. PROBLEMS IN APPLIED ART. *Mr. Grant.* Opportunity is given for the pursuit of individual projects in the graphic arts to suit the interest and ability of the student. (May be repeated.) 1 to 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

II-2. FUNDAMENTALS OF DRAWING AND DESIGN. *Staff*. Year course. Open only by special permission. *MWF, 1:15-4:05*.

II-21. BEGINNING PAINTING. *Mr. Dike*. Year course. Prerequisite II-2 or its equivalent. *TTh, 1:15-4:05*.

II-22. BEGINNING WEAVING. *Mrs. Stewart*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-23. BEGINNING CERAMICS. *Mr. Petterson*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-30. BEGINNING SCULPTURE. *Mr. Stewart*. Year course. Prerequisite II-2 or its equivalent and permission of instructor. *MWF, 1:15-4:05*.

II-121. ADVANCED PAINTING. *Mr. Sheets*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-122. WEAVING. *Mrs. Stewart*. Year course. Prerequisite II-2 or its equivalent. *MWF, 1:15-4:05*.

II-123. CERAMICS. *Mr. Petterson*. Year course. May be repeated for credit. Prerequisite II-2 or equivalent. *TTh, 1:15-4:05*.

II-130. SCULPTURE. *Mr. Stewart*. Year course. May be repeated for credit. Prerequisite II-2 or equivalent and permission of instructor. *MWF, 1:15-4:05*.

II-141. PRINCIPLES OF ARCHITECTURE AND DESIGN. *Mr. Scott*. One or two year course. Prerequisite II-2 or equivalent. By permission of instructor. *TTh, 1:15-4:05* and arranged hour.

I-170. PRINTING. *Mr. Foster*. One or two year course. *TTh, 1:15-4:05*. Registration by permission of the instructor.

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Graduate work in the history of art and architecture and in applied art available under the auspices of the Claremont Graduate School.

Astronomy

Pomona College was a pioneer in the study of astronomy in Southern California, which has now become the greatest center for research in this field. The Observatory at Mt. Wilson which houses the 100 inch telescope can be seen from the campus. The famous Mt. Palomar Observatory with its 200 inch telescope is about 100 miles from the campus. Field trips are made regularly to each of these observatories.

The general prerequisites for upper division courses or for concentration in the department are Astronomy 51, its equivalent, or a satisfactory background in science. Students transferring from Junior College or elsewhere may also qualify for upper division registration or departmental concentration by establishing the same prerequisites.

A basic program for concentration in Astronomy, with minor in Mathematics and Physics, should include Astronomy 155, 156, and at least six units of 180, together with not less than six units of mathematics selected from Mathematics 52, 151, 152, and four to seven units from Physics 153, 154 and 155. In special cases related upper division courses in chemistry or geology may be substituted in the minor fields. A reading knowledge of French and German is also recommended.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 102; Geology 59, 110 and 112, plus additional upper-division units totaling a minimum of 24, selected from Astronomy 103 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 151. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

112a-51b. *DESCRIPTIVE ASTRONOMY. Mr. Whitney.* A study of historical and modern astronomy presented in non-technical form. Develops acquaintance with the planets and constellations and an appreciation of man's relation to the surrounding universe. Regular evenings with the telescopes at the Brackett Observatory are supplemented by project assignments and field excursions to the astronomical centers of the region. Classroom two hours per week; observatory, one period per week. Laboratory fee \$2.00 per semester. 3 units. *MWF, 11.*

102a, 102b. *PRACTICAL ASTRONOMY AND METEOROLOGY. Mr. Whitney.* Consists of sun observations with telescope and spectroheliometer; studies of cloud formations and air mass movements related to current weather and readings of the Weather Bureau instruments at the Brackett Observatory. Photographic recording of observations introduce studies of the basic principles of the photographic process, and characteristics of various films and plates. Facilities and credit are also offered for those wishing to make their own telescope mirrors. One class period and two laboratory periods. Laboratory fee \$2.00. First semester. 3 units. Arranged.

103. *NAVIGATION. Mr. Whitney.* A basic course in the principles and practice underlying marine and air navigation. Observations of sun, moon and stars with sextants and transits of different types, and use of the latest almanacs and navigation tables provide practical experience in solving navigation problems. Prerequisite, Plane Trigonometry. 3 units. Second semester. Laboratory fee \$2.00. Class *TTh, 1:15.* Laboratory arranged.

155. *CELESTIAL MECHANICS. Mr. Whitney.* A short course in the application of the laws of mechanics and gravitation to the motions of the heavenly bodies with problems on the prediction of eclipses and occultations and on the computation of the orbits of comets. 3 units. First semester. Arranged.

156. *ASTROPHYSICS. Mr. Whitney.* Develops the interrelation between the sciences of physics and astronomy. The principles of modern physics are applied to astronomical subjects through the application of spectrum analysis to studies of the light from sun, stars and nebulae. Laboratory observations are both

visual and photographic. Class, one hour, laboratory one period. Laboratory fee \$2.00. Second semester. 2 units. Class *W*, 2:15. Laboratory arranged.

180. INVESTIGATIONS IN ASTRONOMY. *Mr. Whitney*. A unified program of investigation is followed in some special field such as variable stars, lunar studies, solar phenomena, etc. Each semester, 1 to 4 units. May be repeated for credit. Laboratory fee \$2.00 per unit per semester. May also be elected for advanced study in navigation. Arranged.

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Graduate work in Applied Astronomy is available under the auspices of the Claremont Graduate School.

Biology

Requirements for concentration: Biology 112; Botany 12, 14, 15, 75, and at least nine units chosen from 103, 105a, 107 or 117, or 123a; Zoology 1, 37 or 137; and nine units chosen from 106, 107, 117, 130, 150, 157. (Biology 105 may be substituted for any upper division course in the above list except Biology 112); additional upper division courses in botany, zoology, or biology to bring the total to 30 units or more. Related fields: high school or college chemistry; Physics 1 or 51, or Geology 1a, 1b and 2a, 2b.

1a. GENERAL BIOLOGY. *Mr. Pequegnat and Staff*. A general course designed primarily for those who do not intend to take further work in biology. It may be taken for credit by those who have high school biology, botany, or zoology. It will consider material, methods and fundamental principles in the selected fields of biology considered most significant for every human being. Class and laboratory demonstrations. Fee \$6.00. 3 units. First semester. Class *MWF*, 10 or 11. In addition register for any *one* of the following demonstration hours: *M*, 9, 10, 11, 1, 2, 3, or 4.

1b. GENERAL BIOLOGY. *Mr. Phillips*. A continuation of Biology 1a with emphasis on plant study. Class, demonstration and laboratory. Laboratory fee \$6.00. 3 units. Second semester. *MWF*, 10 or 11 must be kept open for class either *T* or *W*, 1:15 to 4:00 must be kept open for laboratory.

14. FIELD STUDIES OF EVOLUTION. See Botany 14.

105. BACTERIOLOGY. *Mr. Amrein*. General study of important bacteria, methods of culture and study, and their importance in disease and agriculture. Prerequisite: one year of biological work. Laboratory fee \$8.00. Second semester 4 units. Class, *WF*, 10; Laboratory, *MW*, 2:15 to 4:10.

112. GENETICS. *Mr. McCarthy*. This course considers modern developments in the study of heredity and evolution and their general application to plants and animal breeding and to eugenics and race questions. Prerequisite: one year of biological work. 3 units. Second semester. *MWF*, 10.

159a, 159b. HISTORY OF BIOLOGY. *Mr. Ryerson, Mr. Amrein.* A commentary on the progressive trends and periods of biological science, tracing the continuity of ideas which have culminated in important discoveries. Leaders in each field are considered for special study in which the influences of their discoveries upon society and development of science are analyzed. 2 units. *TTh, 10.*

Botany

Although botany is a pure science, and the curriculum at Pomona is planned with this in mind, the subject offers excellent basic training for applied fields. Study of botany may serve as preparation for graduate study and eventually for teaching, research, or service with such federal, state, or county governmental agencies as the United States Bureau of Plant Industry, Forest Service including the Forest and Range Experiment Stations, National Park Service, Soil Conservation Service, Fish and Wild Life Service, state fish and game commissions, or agricultural inspection agencies.

Botany Concentration: LOWER DIVISION COURSES, Botany 12, 14, 15, 75 (at least 3 times); Zoology 1 (or Biology 1a and a summer session at the Marine Laboratory). UPPER DIVISION COURSES, Botany 103, 105, 107, 117, 123a, 123b, or 158, and additional courses in botany (other than 181), selected to make a total of 24 to 36 units of upper division work. RELATED FIELDS, Biology 112; high school or college chemistry (students emphasizing plant physiology should have Chemistry 1, 59, and 106, and 110 is recommended); high school or college physics (Physics 1 or 51) or Geology 1. Prospective candidates for graduate work should consult the department concerning foreign language requirements.

Seniors with concentration programs in botany or in biology emphasizing botany are required either (1) to present a satisfactory paper and to pass an oral examination on the field of the paper, or (2) to pass the senior comprehensive examination.

Plant Collection: All students concentrating in botany should consult Mr. Benson concerning the plant collection built up in various courses. This is a graduation requirement, and the collection must be submitted for inspection at the time of the senior comprehensive examination. Credit for individual work on the collection may be had by registration in Botany 75. *This course should be taken in the last semester before graduation* in order to bring the collection into good order before it is submitted for inspection.

Botany-Zoology Concentration: See Biology.

Botany-Chemistry Concentration: LOWER DIVISION COURSES, Botany 12, 14, 15, 75 (at least twice); Chemistry 1, 59; Physics 51. UPPER DIVISION COURSES, Botany 103, 105a, 107 or 117, 123, and 158; Chemistry 106, 110, 111. Recommended lectures from the following list: Biology 112; Botany 105b, 167, 175; Chemistry 58, 184, 187; Zoology 1, 37, 137. Botany 12, 14, and 15 and Chemistry 1 should

be taken in the freshman year, and the full program should be planned as early as possible.

12. GENERAL BOTANY. *Mr. Benson and Mr. Phillips.* An elementary course primarily for those wishing general information concerning plants but also serving as foundation work in botany. A study of plants as living organisms with emphasis upon structure and physiology of flowering plants; studies of evolution and of heredity. Laboratory fee \$6.50. Ordinarily 3 units, but students who have studied evolution and heredity in college biology or zoology may enroll for 2 units, ordinarily substituting Botany 14 for the third unit. First semester, class, *TTh*, 1:15-2:05, and a few special meetings; laboratory section *A*, *T*, 2:15-4:05; Section *B*, (if there is sufficient demand), *F*, 1:15-3:05.

14. FIELD STUDIES OF EVOLUTION. *Mr. Phillips and Mr. Benson.* Evidences of evolution; differentiation and isolation of species. Field studies of evolving populations of plants, hybrid swarms resulting from interbreeding of species, flow of genes from one species to another, physiological and ecological factors effecting evolution, and structural and physiological modifications of plants growing on mountains, deserts, beaches, marshes, woodlands, and brushlands. Study of living plants under natural conditions and of their seedlings in the greenhouse. May be taken simultaneously with Botany 12 or independently. Laboratory and field trip fee \$6.50. 2 units. First semester. Class, *W*, 1:15-2:05; field trips, *W*, 2:15-4:05 and some longer trips.

15. FIELD CLASSIFICATION OF FLOWERING PLANTS, CONIFERS, AND FERNS. *Mr. Benson.* An elementary course in classification of primarily the flowering plants but also of ferns and cone-bearing trees; with much field work. No pre-requisite, but permission of the instructor required. Laboratory and field trip fee \$8.75. 3 units. Students concentrating in botany or biology with emphasis on botany must, others may, register for at least 1 unit of Botany 75 concurrently. Second semester. Class, *TTh* 1:15-2:05; Field Section *A*, *T*, 1:15-3:05, Section *B*, (if sufficient demand), *F*, 1:15-3:05. There are some additional longer trips.

75. PLANT CLASSIFICATION. *Mr. Benson.* Individual work in classification of vascular plants (ferns, cone-bearing trees, and flowering plants). The student begins or continues a collection of specimens used for developing a comparative method of plant identification. May be taken as an Elective, but required concurrently with Botany 15 for those concentrating in botany or in biology with emphasis on botany. May be repeated for credit. Permission of instructor required. Laboratory fee \$2.00 per unit. 1 or 2 units. First semester, arranged. Second semester, arranged, but ordinarily, including either *F*, 11 or (when taken the first time) *Th*, 2:15-3:05.

81. ELEMENTARY BOTANICAL PROBLEMS. *Staff.* This course offers to qualified students opportunities for additional supervised laboratory work in such fields as (a) structure and classification of algae, (b) culture and special physiology of plants of any group favorable for study, (c) structure and development of plants, or (d) ecology. Each semester, 1 or 2 units, but not more than 1 unit may be taken in the first enrollment for a problems course. May be repeated

or credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

103. PLANT ECOLOGY (AUTECOLOGY). *Mr. Phillips*. A study of the effect of environment upon plants of forests, deserts, chaparral, grassland, and woodland, including the use of ecological and weather instruments in the field; the effect of plants on the environment; and ecological adaptation in relation to plant evolution. Prerequisite: Botany 12 or permission of the instructor. Laboratory fee \$8.00 and breakage deposit \$5.00. First semester. Class *TTh, 10*; laboratory and field trips, *Th, 2:15-4:05* and occasional longer trips. (Omitted in 1953-54.)

105a, 105b. CLASSIFICATION OF FLOWERING PLANTS. *Mr. Benson*. Study of the local native flowering plants and also of ferns and cone-bearing trees. Evolutionary series of orders and families of flowering plants. Principles and methods of classification of the higher taxa; history of botanical classification; geographical distribution of plants correlated with geological history; practice in identification. Field trips for study of plants in their native habitats. Prerequisite, Botany 15. Laboratory and field trip fee \$8.75 each semester. 3 units. Given in alternate years. Class, *MW, 11*; laboratory and field trips, *M, 2:15-5:05*. (Omitted in 1953-54.)

107. STRUCTURE, DEVELOPMENT, AND RELATIONSHIPS OF NON-VASCULAR PLANTS. *Mr. Phillips*. A review of the structure, evolutionary series, and relationships of classes and orders of algae, fungi, mosses, and liverworts. Prerequisite, concurrent registration in Botany 12 or equivalent. Laboratory fee \$8.00. 3 units. First semester. Given in alternate years. Class, *MW, 11*; laboratory and field trips, *Th, 2:15-5:05*.

117. STRUCTURE, DEVELOPMENT, AND RELATIONSHIPS OF VASCULAR PLANTS. *Mr. Benson*. A review of the structure, evolutionary series, and relationships of the classes and orders of pteridophytes (ferns, etc.) and gymnosperms (cone-bearing trees), and of the fundamental life history of flowering plants. Prerequisite, Botany 12 or equivalent. Laboratory fee \$8.00. 3 units. Second semester. Given in alternate years. Class, *MW, 11*; laboratory and field, *M, 2:15-5:05*.

123a, 123b. PLANT PHYSIOLOGY. *Mr. Phillips*. A study of physiological processes and principles, including photosynthesis, germination, dormancy, water relations, mineral nutrition, respiration, growth and growth hormones, and factors affecting flowering and fruiting. Experiments include growing plants in the greenhouse and laboratory exercises. Prerequisite: Botany 12 and high school chemistry, or permission of the instructor. Laboratory fee \$10.00 each semester and breakage deposit \$5.00. 4 units. Given in alternate years. Class *Th, 10*; laboratory *Th, 2:15-4:05* and 1 hour arranged.

128. ADVANCED PLANT ECOLOGY (SYNECOLOGY). *Mr. Phillips*. The analysis of plant communities by various types of field sample plots to determine which plants are associated and why; discussions of factors affecting plant geography and the major plant communities primarily of the United States. Prerequisites: Botany 12, 15, 103, and completion of or concurrent registra-

tion in Botany 105; or permission of the instructor. Laboratory fee \$8.00. 3 units. Second semester. Given in alternate years. Class *TTh, 10*; laboratory and field trips *Th, 2:15-4:05*, and occasional longer trips. (Omitted in 1953-54.)

167. PLANT MICROTECHNIQUE. *Mr. Phillips*. Preparation of microscope slides with practice on materials partly of the student's own choosing to represent structure or development of plants or for cytological data. Prerequisites, Botany 12, 107 or 117; or permission of the instructor. Laboratory fee \$7.00 and the cost of special materials for the student's slide collection. First semester. 2 units. Given in alternate years. Class, *F, 11*; laboratory, arranged on *T* between 1:15 and 5:05. (Omitted in 1953-54.)

175. EVOLUTION OF SPECIES AND PRINCIPLES OF PLANT CLASSIFICATION. *Mr. Benson*. Field studies on the evolution and definition of species; principles involved in organizing plant groups according to genetic relationships into genera, species, and varieties: methods of exploration for data; classification of native populations. Students enrolled for three units will study problems of choice of scientific names, description, and methods of preparation and documentation of technical papers on plant classification. In most instances concurrent registration in Botany 14 is desirable. Laboratory and field trip fee \$9.00. First semester. 2 or 3 units. Given in alternate years. Class *F, 11*, and for those registered for 3 units, 1 hour arranged, this and the field trip time to be arranged at an advance class meeting during preregistration.

181. ADVANCED BOTANICAL PROBLEMS. *Staff*. Special individual work in any field of botany for students with adequate preparation. The student may anticipate preparation of a thesis for the Master's Degree by beginning a problem or continuing one begun in Botany 123, 158, 167, 175 or other courses, or he may work upon any significant problem approved by the instructor. Each semester. 1 to 3 units. May be repeated for credit. Permission of the instructor required. Laboratory fee \$2.00 per unit. Arranged.

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Graduate work in botany is offered through the Claremont Graduate School by the joint staffs of Pomona College and the Rancho Santa Ana Botanic Garden (now located in Claremont). The facilities for research in plant classification are particularly good because the Pomona College Herbarium includes about 315,000 specimens and the combined herbaria 400,000. The libraries of both institutions have been developed primarily for work in this field, and the Garden has unusual facilities for experimental study of species. The instruction and research staffs include specialists in plant taxonomy or systematic botany, experimental study of evolution of species, cytology and genetics, ecology and plant physiology, and mycology and cryptogamic botany. The vicinity of Claremont offers remarkable opportunities for field study of both plant classification and ecology because forest, alpine, woodland, chaparral, grassland, ocean shore, and various desert floras occur within a forty mile radius.

GRADUATE COURSES OPEN TO QUALIFIED UNDERGRADUATES

207. PLANT ANATOMY. *Mr. Munz*. Internal structure of higher plants. 3 units. Second semester. One 2-hour class period and one laboratory. Arranged.
210. CYTOLOGY. *Mr. Lenz*. Structure and function of the plant cell. 3 units. (Omitted in 1953-54.)
- 220a, 220b. EVOLUTION. *Mr. Grant*. Variation, selection, drift, isolating mechanisms, hybridization, polyploidy, evolutionary rates, evolutionary trends. 4 units each semester. (Omitted in 1953-54.)
225. PHYLOGENY OF ANGIOSPERMS. *Mr. Munz*. Evolution of and relationships in flowering plants. 3 units. (Omitted in 1953-54.)
- 227a, 227b. MORPHOLOGY AND CLASSIFICATION OF FUNGI. *Mr. Benjamin*. A general course in mycology. 4 units each semester. Class, 2 hours, arranged; laboratory *T* afternoon and arranged.
245. PLANT GEOGRAPHY. *Mr. Munz*. The vegetation of the earth with reference to geological history, present distribution, and evolution. 2 or 3 units. Arranged.
247. MORPHOLOGY AND CLASSIFICATION OF VASCULAR PLANTS EXCLUSIVE OF ANGIOSPERMS. *Mr. Munz*. Research literature, general papers, and books; a non-laboratory course. 3 units. (Omitted in 1953-54.)

Zoology

Three programs of concentration are offered: Zoology; Zoology-Chemistry; and Zoology-Botany (Biology). Students interested in pre-medical training should consult the pre-medical course under Pre-professional Programs.

Zoology Concentration. Requirements: Zoology 1, 117, 137, and 157. In addition Zoology 130 and 150 and Biology 159 are strongly recommended.

Zoology-Chemistry Concentration. Requirements: Zoology 1, 137, and Biology 105; Chemistry 1, 59, 106, and one semester of 110 and 111; Physics 1 or 51; and 8 units chosen from Chemistry 110b, 111b, 107; Zoology 106, 107, 117, 157, and Biology 159.

Zoology-Botany Concentration. For requirements consult program listed under Biology.

The Zoology Department of Pomona College in an arrangement with the California Institute of Technology offers summer work at the Kerckhoff Marine Laboratory at Corona del Mar. The 1953 session will run from August 3 to September 5 inclusive. Tuition for full registration (6 units) \$90.00. Further information may be secured from the Department of Zoology.

1a, 1b. GENERAL ZOOLOGY. *Mr. Pequegnat and Staff*. An introduction to all the special fields of modern zoology for those desiring general information concerning animals, as well as for majors in the department. Reference is made to all classes of animals, but only those forms which best illustrate important zoological principles are studied intensively. No prerequisites. Laboratory fee \$6.00 each semester. 3 units. Class *TTh*, 8 or 10; laboratory section (choose one of the following): *W*, 1 to 3 or 3:15 to 5:15, or *Th*, 1 to 3 or 3:15 to 5:15.

11. MARINE ZOOLOGY AND ECOLOGY. *Mr. Pequegnat*. An elementary course devoted to discussion of biological principles as observed in marine animals. In addition considerable attention is given to the evolutionary development of the various groups, as well as to their specific identification, their ecological distribution, and their habits. Lecture, laboratory, and field work. Designed especially to fulfill the Biological Science requirement. Offered at the Marine Laboratory. 6 units.

37. INTRODUCTION TO ANATOMY AND PHYSIOLOGY. *Mr. McCarthy*. A course designed primarily for students whose interests lie in physical education, physical or occupational therapy or nursing, psychology or sociology. Special attention given to the human subject. 4 units. Laboratory fee \$6.00. Prerequisite: Biology 1. Second semester. Class, *MWF*, 11, laboratory *F*, 1:15 to 4:05.

106. PARASITOLOGY. *Mr. Amrein*. An introduction to the general nature of parasitism, including a survey of all types of animal parasites in which those of greatest medical, economic, and social importance to man will receive major consideration. Prerequisite, any one of following: Zoology 1, 11, or Biology 1. 2 units. First semester. *WF*, 9.

107. PARASITOLOGY LABORATORY. *Mr. Amrein*. Study both of prepared materials of significant parasites and their biological vectors, and of living parasites removed from invertebrate and vertebrate hosts. Prerequisite: Zoology 106 (may be taken concurrently). Laboratory fee \$4.00. 1 unit. First semester. *M*, 2:15-5:05.

117a-117b. DEVELOPMENTAL AND COMPARATIVE ANATOMY. *Mr. McCarthy, Mr. Pequegnat*. A study of development of representative vertebrates from fertilization through organogenesis, and an analysis of the phylogenetic changes undergone by organ-systems. Prerequisite: Zoology 1. Laboratory fee \$8.00 each semester. 4 units. Class, *MW*, 9. Laboratory either *TTh*, 1-3 or 3:15-5:15.

125. HISTOLOGICAL TECHNIQUE. *Mr. McCarthy*. Theory and practice of preparation of vertebrate cells and tissues for microscopical study. Prerequisite: Zoology 1. May be repeated for credit. Laboratory fee \$4.00. 2 units. Second semester. *Th*, 8; laboratory *Th*, 1:15-4:05.

130. MARINE INVERTEBRATES. *Mr. Pequegnat*. A study of invertebrates residing in the sea from the points of view of their phylogenetic relationships, their morphology, and their physiology. Lecture and laboratory. Laboratory devoted principally to Pacific Coast types. Offered at the Marine Laboratory. 3 units.

137a, 137b. ADVANCED ANATOMY AND PHYSIOLOGY. *Mr. Ryerson*. A course integrating the discipline of anatomy and physiology, including regional dis-

section of the mammal and microscopic study of tissues and laboratory experiments in physiology. Prerequisites: Zoology 1 or 37. General chemistry recommended. 5 units. Laboratory fee \$8.00 each semester. Class, *MWF*, 8; laboratory *TTh*, 1 to 3 or 3:15-5:15.

50. MARINE ECOLOGY. *Mr. Pequegnat*. A study of marine invertebrates as they exist in the field. Animals are observed and collected in the field and returned to the laboratory for specific identification and observation in the living state. The lectures are devoted to discussion of the distribution of each species observed and the factors which may account for these distributional patterns. The course is so organized that anyone registering for it should thereafter have a thorough grounding in the morphology and physiology of marine invertebrates or take Zoology 130 concurrently. Offered at the Marine Laboratory. 3 units.

57a, 157b. ANIMAL ECOLOGY. *Mr. Amrein, Mr. Pequegnat*. A study of the land vertebrates and insects, principally of this region, considering the bases of classification, life histories, populations, and the factors which account for their present distribution. 3 units. Laboratory fee \$4.00. Class, *TTh*, 9; laboratory *F*, 1:15 to 4:05.

99. INTRODUCTION TO RESEARCH IN ZOOLOGY. *Staff*. Each semester. 1 to 3 units. May be repeated for credit. Laboratory fee \$2.00 per unit. Offered at Marine Laboratory as well as at Claremont. Arranged.

Chemistry

Concentration Requirements: Chemistry 1, 59, 106, 107, 110, 111, 158, 159; Physics 51; Mathematics 1, 65.

Preprofessional Program: Students who plan professional work in Chemistry should follow the suggested program below. It is based upon the recommendations of the American Chemical Society Committee for Professional Training of Chemists. Pomona College has been placed upon the approved list by this committee. The schedule is intended as a guide only for aid in planning the program and individual deviations may be made as needed.

Freshman Year: Chemistry 1 or (59-106); Mathematics 1; English 1; Electives.

Sophomore Year: Chemistry 59-106 if not taken in first year, 110, 111; Mathematics 65; Physics 51; German 1; Electives.

Junior Year: Chemistry 107, 158, 159; German 53; Electives.

Senior Year: Chemistry 112, 184, 185, 187 (181 and 199 also recommended if not required to satisfy ACS certification); Electives.

Biology-Chemistry Concentration: Requirements: Zoology 1, 137, and Biology 135; Chemistry 1, 59, 106, and one semester of 110 and 111; Physics 1 or 51;

and 8 units chosen from Chemistry 110b, 111b, 107; Zoology 106, 107, 117, 157, and Biology 159.

Botany-Chemistry Concentration: See Botany.

Preparation for Teaching: Students who plan to teach in secondary schools should consult the department before registration for the junior and senior years. By proper coordination of work it is possible to obtain the Master's degree in Chemistry and the general secondary credential upon completion of graduate work for one year plus two summer sessions.

Fees: A fee is required for each laboratory course, to cover the cost of chemicals. In addition a locker deposit must be made to cover breakage and loss of equipment. The unused balance of the deposit is returned at the end of the year.

1a, 1b. **INTRODUCTORY CHEMISTRY.** *Mr. Smith.* Beginning course to acquaint the student with basic laws of chemistry and reactions of the more common elements. 4 units. Lectures, *MWF*, 9. Laboratory *TTh or F*, 1:15-4:05. Fee \$6.00 each semester. Deposit, \$5.00 for the year.

Second Year Chemistry. Exceptionally well prepared students may omit Chemistry 1 and start with 59. The courses in qualitative and quantitative analysis, Chemistry 59, 106, are coordinated to give an advanced review of chemical reactions and theories along with the study of analytical methods.

59. **QUALITATIVE ANALYSIS.** *Mr. Mooi.* The lectures deal with application of the principles of chemical equilibrium to the separations and identification of the common ions, and with the chemical reactions of these ions. Semimicro analytical procedures are used. The course is offered for 3 or 4 units. The 4 unit course contains additional lectures on the chemistry of the elements and will be taken by students who have not taken Chemistry 1 or its equivalent. The 3 unit course will be taken by those who have had Chemistry 1 or its equivalent. Prerequisite: Chemistry 1 or consent of instructor. 3 or 4 units. Fee \$6.00, deposit, \$5.00. First semester. Lecture *TTh*, 10. Laboratory, *M*, 2:15-5:05; *W*, 1:15-4:05.

106. **BEGINNING QUANTITATIVE ANALYSIS.** *Mr. Mooi.* The lectures deal with the theory and practice of analytical methods. The course is offered for 3 or 4 units. The 4 unit course contains additional lectures on selected topics of inorganic chemistry and will be taken by students who have not taken Chemistry 1 or its equivalent. The 3 unit course will be taken by those who have had Chemistry 1 or its equivalent. Prerequisite: Chemistry 59. 3 or 4 units. Fee \$8.00, deposit, \$5.00. Second semester. Lectures, *TTh*, 10. Laboratory, *M*, 2:15-5:05; *W*, 1:15-4:05.

107. **ADVANCED QUANTITATIVE ANALYSIS.** *Mr. Smith.* Prerequisite, Chemistry 106 or equivalent. 3 units. Fee \$8.00, deposit \$5.00. First semester. Laboratory, *M*, 2:15-5:05 and *TW*, 1:15-4:05.

10a, 110b. ELEMENTARY ORGANIC CHEMISTRY. *Mr. Hansch.* The first semester is a survey of organic chemistry including aliphatic and aromatic chemistry. The second semester is a more detailed study of some of the more advanced organic reactions. Prerequisite, Chemistry 1 or equivalent. 3 units. Lectures *MWF*, 11.

11a, 111b. INTRODUCTION TO ORGANIC LABORATORY METHODS. *Mr. Hansch.* First semester, instruction in laboratory operations and organic preparations. Second semester, organic preparations and introduction to qualitative organic analysis. 1 unit. Fee \$6.00, deposit \$5.00 each semester. Laboratory first semester, *M*, 2:15-5:05; *Th* 1:15-4:05; second semester, *Th*, 1:15-4:05.

12a, 112b. ORGANIC SYNTHESSES. *Mr. Hansch.* Advanced preparations to supplement the laboratory work of Chemistry 111. Open only to students completing the pre-professional program. 1 unit. Prerequisite, Chemistry 110, 111. Fee \$7.50, deposit \$5.00 each semester. Laboratory *Th*, 1:15-4:05.

13a, 158b. PHYSICAL CHEMISTRY. *Mr. Smith.* Prerequisite Chemistry 106, 110, Physics 51, Mathematics 65. Chemistry 110 may be taken concurrently. 3 units. Lectures *TThS*, 10.

13b. PHYSICAL CHEMISTRY LABORATORY. *Mr. Smith.* Prerequisite, Chemistry 158a. (158b may be taken concurrently.) 3 units. Fee \$10.00, deposit \$5.00. Second semester. Laboratory *M*, 2:15-5:10 and *TW*, 1:15-4:05.

14a, 181b. USE OF CHEMICAL LITERATURE. *Staff.* Lectures and assigned problems on the methods for effective use of chemical literature. Prerequisite: Chemistry 110, German 1. 1 unit. Arranged.

15. ADVANCED ORGANIC CHEMISTRY. *Mr. Hansch.* A survey of current theories of organic reaction mechanisms. Prerequisite, Chemistry 110, 158a. 3 units. Second semester. Lectures *MWF*, 9.

16. ADVANCED INORGANIC CHEMISTRY. *Mr. Mooi.* The lectures will include discussion of atomic and molecular structure and such selected topics as coordination compounds, nuclear chemistry, and chemical statistics. Prerequisites: Chemistry 107, 110, 158 (may be taken concurrently). 3 units. First semester. Lectures *MWF*, 9.

17. QUALITATIVE ORGANIC ANALYSIS. *Mr. Hansch.* The use of systematic procedures for the identification of organic compounds. Prerequisite, Chemistry 106, 110, and reading knowledge of German. 3 units. Fee \$7.50, deposit \$5.00. First semester. Laboratory *W*, 1:15-4:10, plus at least two arranged periods.

18. UNDERGRADUATE RESEARCH. *Staff.* Seniors may take 6 units of research in Physical, Organic or Analytical Chemistry, under direction of a staff member. The work may be taken in one semester or extended over two. A thesis is required. Prerequisite, average of B in chemistry courses and consent of instructor. Fee \$3.00 per unit, deposit \$5.00. Each semester. Arranged.

NC 171. GLASSBLOWING. *Mr. Smith.* Training is given in the fundamental operations involved in the construction of scientific glass apparatus (in seals, metal to glass seals, construction of mercury vapor pump and McLeod gauge). Academic credit toward graduation is not given for this course but the registrant receives a recorded grade indicating the proficiency attained 2 units. Either semester. Fee \$7.50 plus cost of glass used. Laboratory arranged.

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Graduate work leading to the M.A. degree is offered under auspices of the Claremont Graduate School. The Claremont catalog should be consulted for details.

Classics

In the interest of providing a maximum offering in Classics, a coordinated program is offered by the departments of Pomona and Scripps College. This broad program is thereby assured to meet the needs of all students who desire training in Latin and Greek or in the literature of Classical Antiquity in translation. Mr. Carroll will gladly advise Pomona students regarding opportunities in this program, and will assist in developing programs of study which will meet basic requirements.

For concentration in Classical languages and literature a student is required to take at least 24 units in courses numbered over 100 in Greek and Latin languages and 12 units in modern European languages (French and German preferred). A selected reading list from Greek and Latin authors must be completed by the student in class work or outside reading to the satisfaction of the department. Additional courses in ancient and medieval history, philosophy, Continental and English literature, and modern European languages are recommended.

GREEK

51A-51B. ELEMENTARY GREEK. *Mr. Carroll.* A study of the principles of Greek grammar for beginning students. The course is designed to provide a firm foundation for the further study of the language and its literature. Simplified reading materials will be utilized as fully as possible. 3 units. MWF, 8.

101A, 101B. INTERMEDIATE GREEK. *Mr. Carroll or Mr. Palmer (Scripps).* For students who have had Greek 51A-51B or equivalent. A reading course in Greek with selections from the Apology of Socrates, Homer's Odyssey, Euripides' Medea, the Greek New Testament and Church Fathers. 3 units. Arranged.

182A, 182B. GREEK READINGS AND COMPOSITION. *Mr. Carroll or Mr. Palmer (Scripps).* A course for concentrators and those who have completed Greek 101 or equivalent. Additional readings in Greek literature with a thorough review of Greek rhetoric and grammar. Composition will be required but at a minimum. This course may be repeated for credit with the permission of the department. 3 units. Arranged.

LATIN

a-1b. **ELEMENTARY LATIN.** *Mr. Carroll or Mr. Palmer (Scripps).* Latin grammar and syntax for students with no secondary school Latin. The aims and purposes of individual students enrolled will be particularly considered by the instructor in this course. Its general goal is to develop an ability to read Latin as quickly as possible, and to make use of that ability for a further understanding of the language. 3 units. *MWF, 8.* (Omitted in 1953-54.)

7a, 57b. **INTERMEDIATE LATIN.** *Mr. Carroll or Mr. Palmer (Scripps).* For students with one or two years of secondary school Latin, or Latin 1a-1b. Selected readings from Sallust, Cicero, Virgil, Ovid, St. Augustine, and the Vulgate Bible. Oral translation and discussions of grammar and syntax will be coordinated with lectures on the history of Latin literature. Emphasis will be on reading Latin as a living language. Attention will be given to the needs of the individual student in preparation of reading program. 3 units. Arranged.

17a, 117b. **ROMAN WRITERS OF THE REPUBLIC.** *Mr. Carroll or Mr. Palmer (Scripps).* A survey in Latin of the outstanding Roman writers in the second and first centuries B.C. An intensive study of a single author will be made during the second semester of the course. Open to all students who have had three years or more of secondary school Latin or the equivalent. 3 units. Arranged. (Omitted in 1953-54.)

18a, 118b. **ROMAN WRITERS OF THE EMPIRE.** *Mr. Carroll or Mr. Palmer (Scripps).* A survey in Latin of the outstanding Roman writers in the first and second centuries A.D. An intensive study of a single author will be made during the second semester of this course. Open to all students who have three years or more of secondary school Latin or equivalent. 3 units. Arranged.

81a, 181b. **LATIN READINGS AND COMPOSITION.** *Mr. Carroll or Mr. Palmer (Scripps).* A course for concentrators and those who have completed Latin 17 and 118 or equivalents. Selected passages of Latin will be read and analyzed in terms of Classical prose and poetic rhetoric and grammar. Translations from English into Latin will be regularly required. This course may be repeated for credit with the permission of the department. 3 units. Arranged.

GREEK AND ROMAN LITERATURE IN TRANSLATION

50a, 160b. **CLASSICAL EPIC, DRAMA AND PROSE IN THE WESTERN HERITAGE.** *Mr. Carroll.* A course in general education for all students desiring orientation in the culture of the Graeco-Roman world and its legacy to modern civilization. No previous training is required in Classical languages or Ancient history. A broad program of lectures covering the salient phases of ancient life and art will be integrated with a reading program in translation including Homer, Vergil, the Classical dramatists, Thucydides, Tacitus, Aristotle and St. Augustine. An effort will be made to trace the principal intellectual currents of antiquity and to indicate their influence upon modern art, literature and society. 3 units. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

I-106. GREEK AND ROMAN COMEDY AND SATIRE. *Mr. Palmer.* A course designed to cover in English translation the dramas of Aristophanes, Menander, Plautus, and Terence and the literature of the outstanding Greek and Roman writers in the field of satire. Lectures will be given on the history of the development of the theatre, on the history of comedy and the mime, and on the development of satire and satiric forms. Year course. Arranged (Omitted in 1953-54.)

I-107. GREEK AND ROMAN TRAGEDY. *Mr. Palmer.* A course designed to cover in English translation the dramas of Aeschylus, Sophocles, Euripides and Seneca. Lectures will be given on the history of the development of the theatre, on the history of tragedy, and on the development of the tragic form. 3 units. Arranged.

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HISTORY OF GREECE. For description see History 101.

HISTORY OF ROME. For description see History 102.

ANCIENT ART AND ARCHAEOLOGY. For description see Art 55a, 55b.

Comparative Literature

Concentration in Continental Literature. Designed for students who are interested in European Literature.

Requirements: 24 units in courses numbered over 100. Twelve of these units must be in Continental Literature (in translation), twelve in European or classic literature in the original language. Electives in English literature and Classics 160a, b are strongly recommended.

I81. READINGS IN CONTINENTAL LITERATURE IN TRANSLATION. *Mr. Bauman.* A study of outstanding works of Goethe, Dostoevsky, Tolstoy, Ibsen and others (for Juniors and Seniors only). 3 units. May be repeated for credit. Second semester. Arranged.

AVAILABLE AT SCRIPPS COLLEGE

I-152a, 152b. COMPARATIVE LITERATURE. *Mr. Merlan.* Year course. W 4:15-6:05. (Omitted 1953-54.)

Economics

A concentration program in Economics is suggested in general for those who wish to understand the nature and operation of the economic system in which they live and in particular for the student who contemplates a career in business, law, teaching, or research. Emphasis in the training is on sources of information and processes of analysis which are essential to leaders in the business and professional world.

Prerequisites: Economics 51 and 52 or equivalent, are prerequisites for all advanced courses in economics.

Required courses: Economics 57, 71, 103, 104, 109, 110, and other courses in economics to bring the total of upper division courses to 24 units.

Recommended program for Pre-Business, Pre-Law, and Industrial Research and Management students: Economics 51, 52, 57 and 71 in the sophomore year, 103, 104, 109, 110 in the junior year, and 111, 198 or 199, and other courses in the field of the student's special interest during the senior year to bring the total of upper division courses in economics to 24 units.

Pre-Professional programs: Students planning to take graduate work in business administration or law should include courses in English writing and literature, speech, psychology, and philosophy in addition to courses in government, history, and sociology. Courses in mathematics and in one or more foreign languages are strongly recommended particularly for those intending to take graduate work in economics in preparation for a career in teaching or research.

Honors Study: A student who wishes to major in Economics and pursue an individualized program of honors study should confer with a member of the department during his sophomore or junior year.

Junior Transfers: Transfer students should consult with some member of the Economics staff with a view to adjusting their programs so as to achieve satisfactory concentration.

Three-Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three-year program enabling them to earn both the B.A. and M.A. degrees. The work for the Master's degree may be taken in economics, business & public administration, or in political economy.

In addition, the Claremont Summer Session, sponsored jointly by the four associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them, within the three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

AMERICAN ECONOMIC AND POLITICAL INSTITUTIONS

Pomona College believes that its graduates should be familiar with the economic and political foundations of American life. To this end the Departments of Economics and Government have organized a year course in American economic and political institutions through which students who cannot take full year in each subject may nevertheless gain some understanding of both fields. This course combines a semester's study of economics with another semester devoted to American Government and the formal classwork is sup-

plemented by a series of special lectures which all students are expected to attend. These lectures (which are open to other students and faculty as well) are designed to present the insights of persons who have had practical experience in business and government and the speakers are chosen from leaders in government, industry, finance, labor and law.

That part of the course pertaining to economic institutions (Economics 51) is offered only during the fall term and that pertaining to politics (Government 52) only in the spring but students may begin the course at whichever time best suits their schedules. The combined course may be offered in fulfillment of one of the requirements for distribution in the lower division. For outline of contents and time schedule see regular course descriptions under the respective departments.

ECONOMICS

51. ECONOMICS. *The Departmental Staff*. An introduction to modern economic society with emphasis on the nature and operation of the American economy. Includes: competitive versus authoritative control; population problems; conservation of resources; forms of business organization; balance sheet and income statement; securities and speculation; money and banking; inflation and deflation; the level of production, income, and employment. Open to freshmen with special permission only. 3 units. First semester. *MWF*, 8, 9, 10; *TThS*, 9, 10; for those continuing second semester with Government 52, *MW* 11; *TThS*, 8.

52. ECONOMICS. *The Departmental Staff*. A continuation of Economics 51 with emphasis on current problems and related public policies. Includes: price analysis; distribution of income; antitrust policy; public utility regulation; agricultural policy; labor problems; taxation and fiscal policy; international trade and finance; and socialist theory and practice. Prerequisite: Economics 51. 3 units. Second semester. *MWF*, 8, 9, 10; *TThS*, 9, 10.

57. STATISTICS FOR THE SOCIAL SCIENCES. *Mr. Kuhn*. A course in the application of quantitative method to economic and social problems with emphasis on the interpretation of the results obtained. Frequency series and time series analysis, elementary sampling, simple correlation, and index numbers. (Credit will not be given for both Economics 57 and Psychology 102.) 3 units. Second semester. *TTh*, 8; laboratory, *T* or *W*, 1:15-3:05.

71. ELEMENTARY ENTERPRISE ACCOUNTING. *Mr. Rostvold*. The theory and practice of accounting in the merchandising business firm. Corporation, partnership, and individual proprietorship accounting. 4 units. First semester. *MWF*, 8; laboratory, *Th* or *F*, 1:15-3:05.

72. ELEMENTARY COST ACCOUNTING. *Mr. Rostvold*. The theory and method of accounting in the manufacturing business unit. Emphasis on job-order process, and standard cost systems. Prerequisite: Economics 71 or equivalent. 4 units. Second semester. *MWF*, 8; laboratory, *Th* or *F*, 1:15-3:05.

ADVANCED COURSES

Economics 51 and 52 or equivalent are prerequisites for all advanced courses in Economics.

103. MONEY AND BANKING. *Mr. Bond.* Principles of money, credit, and banking interpreted in the light of the institutions and financial organization designed to supply society with adequate media of exchange. The relation of money, income, and prices, and the problems of monetary management and fiscal policy. 3 units. First semester. *TThS, 10.*

104. ECONOMIC THEORY AND BUSINESS POLICY. *Mr. Child.* A study of the organization of economic activity through markets and prices with emphasis on the analytical method in economics; resource use and income division in markets containing various mixtures of competition and monopoly; the relationship between economic analysis and business practice. 3 units. First semester. *MWF, 10.*

107. DEVELOPMENT OF THE AMERICAN ECONOMY. *Mr. Kuhn.* A survey of the economic history of the United States. Emphasis is placed on the distinctive factors involved in the growth of the American economy including resources, technological developments, and the cultural milieu. 3 units. First semester. *MWF, 9.*

109. NATIONAL INCOME. *Mr. Rostvold.* A study of national income concepts and their measurement, the determinants of the level of national income and employment, and the general features and causes of fluctuations in economic activity. 3 units. Second semester. *TThS, 10.*

110. INDUSTRIAL COMPETITION AND PUBLIC POLICY. *Mr. Bond.* A study of the basic American policy of maintaining competition to control economic behavior. Corporations, combinations, trade practices, and industrial cooperation; analysis and court interpretation of laws dealing with restraint of trade, monopolizing, unfair competitive methods, discrimination, false advertising, and fair trading; the Antitrust Division and the Federal Trade Commission. 3 units. Second semester. *MWF, 10.*

111. LABOR ECONOMICS. *Mr. Kuhn.* An examination of the tools of economic analysis as applied to problems of labor. A brief history of organized labor is followed by an analysis of wage policies, labor productivity, collective bargaining, minimum wage legislation, labor monopoly, social security, and current labor legislation. 3 units. Second semester. *MWF, 9.*

120. PUBLIC UTILITY ECONOMICS. *Mr. Rostvold.* An historical and analytical study of public utility problems in the United States. Illustrative material is drawn from the various utility industries with emphasis on the economics of overhead costs, and the economic and legal problems involved in the various types of regulation. 3 units. First semester. (Omitted in 1953-54.) *MWF, 10.*

154. INTERNATIONAL TRADE. *Mr. Child.* An analysis of the mechanism, organization, and effects of international trade. Special attention is given to economic problems and policies of nations participating in international trade. 3 units. First semester. *TThS, 9.*

155. INTERNATIONAL FINANCE. *Mr. Child.* An analysis of international monetary relationships with emphasis on the problems and policies associated with these relationships. Prerequisite: Economics 103. 3 units. Second semester. *W*, 1:30-4:00.

158. APPLIED STATISTICS. *Mr. Bond.* A review of the basic concepts covered in Economics 57 followed by a study of the methods currently used in market research, quality control, and public opinion pooling. Designing the sample, questionnaire construction, training interviewers, variance analysis, partial and multiple correlation. 3 units. First semester. (Omitted in 1953-54.) *TThS*, 9.

189. TAXATION. *Mr. Rostvold.* A study of the economic effects of current governmental financial policies with special emphasis on taxation. Other topics to be discussed: state and local finance, the problem of the federal debt, and the relationship between government finance and the level of employment. 3 units. First semester. *TThS*, 10.

191. MONETARY THEORY AND POLICY. *Mr. Bond.* The interrelationships of money, income, and prices, with emphasis on the theory of output as a whole and policies designed to maintain high level employment without inflation. Prerequisites: Economics 103, 104, and 109, or equivalent. 3 units. Second semester. *T*, 1:30-4:00.

195. COMPARATIVE ECONOMIC SYSTEMS. *Mr. Kuhn.* A comparison of the economic organizations of leading nations with special emphasis on the United States and the Soviet Union. 3 units. First semester. *MWF*, 2:15. (Omitted 1953-54.)

198. INTRODUCTION TO RESEARCH. *Mr. Child.* Supervised advanced study in any field of economics. Each student will pursue an individual research project which will provide the basis for oral reports, group discussion, and a final written research report. Open to qualified seniors with the permission of instructor. 3 units. Second semester. *MWF*, 11.

199. READINGS IN ECONOMICS. *Mr. Bond.* Senior seminar devoted to the study of current economic problems and policies with emphasis on sources of information and the use of tools acquired in earlier courses. Selected readings, oral reports, written exercises. Open to qualified seniors with permission of instructor. 3 units. First semester. *MWF*, 11.

BUSINESS LAW. For description, see Government 106.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ACCOUNTING FOR BUSINESS CONTROL. *Mr. Gibbs.* 3 units. Second semester.

TAX ACCOUNTING. *Mr. Briggs.* 3 units. Second semester.

FOREIGN TRADE. *Mr. DeHaas.* 3 units. Second semester.

CORPORATION FINANCE. *Mr. Taylor.* 3 units. First semester.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

Open to qualified seniors with the permission of the chairman of the department and the instructor of the graduate seminar. For other graduate courses, consult the catalog of The Claremont Graduate School.

206. MONETARY THEORY AND POLICY. *Mr. Bond*. 4 units. Second semester.

211. INTERNATIONAL ECONOMIC RELATIONS. *Mr. Child*. 4 units. Second semester.

Education

The courses in Education in Pomona College are designed to supply the general background that an intelligent citizen should have regarding one of our important social institutions and at the same time to prepare a prospective teacher or administrator for the more technical training given in the Claremont Graduate School or in some other graduate institution. All students considering teaching as a career should study the section on "Teaching and Educational Administration" on page 88.

Requirements for concentration: 24 units of work in courses numbered over 100, as prescribed below.

Prerequisite courses: Education 53a, 53b; Psychology 51a-b; Economics 51; Government 52; Sociology 51. *Required courses:* Education 104, 105, 151, 190; Sociology 106, 109 or 112; Psychology 107 and 108; Government 103. Courses beyond the concentration will vary with the individual student but the program should include further work in psychology and sociology as well as some contact with such fields as: art, English, geography, history, life sciences, music, physical education, and speech. Students anticipating teaching in Southern California are urged to acquire some familiarity with the Spanish language.

53a, 53b. INTRODUCTION TO EDUCATION. *Mr. Lee*. The basic course in Education, designed for those who desire an understanding of the place and function of education in America today. 53a deals with the basic philosophy of education in a democracy and with the organization and operation of American education. 53b attempts to survey the educational impact of certain social forces outside the school and to examine some of the major problems confronting contemporary American education. While the listed order is preferable, the two halves of the course may be taken in either order. 3 units. *MWF*, 8.

104. HISTORY OF EDUCATION: EUROPEAN AND COMPARATIVE. *Mr. Lee*. A study and appraisal of the European roots of contemporary American educational traditions and practices, with some attention to the contemporary educational policies and practices in foreign countries. History 1 and 55 or equivalent and Education 53 recommended as preparation. 3 units. First semester. *MWF*, 10.

105. HISTORY OF EDUCATION: UNITED STATES. *Mr. Lee*. A study of the growth and evolution of education in the United States. Stress is placed upon

the intellectual, social, and economic forces which shaped educational developments. History 1 and 55 or equivalent and Education 53 and 104 recommended as preparation. 3 units. Second semester. *MWF, 10.*

151. INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. *Mr. Lee.* A study of the major philosophical approaches to contemporary American education. Both the contributions of historical philosophies and contemporary developments in educational thought will be examined. An attempt to answer the question: What kind of education for modern America? 3 units. First semester. *TThS, 8.*

190. COMPREHENSIVE SEMINAR IN EDUCATION. *Mr. Lee.* A seminar for seniors concentrating in education, designed to synthesize and supplement the several courses required for the major, to prepare for the comprehensive examination and for graduate professional study. Selected educational problems will be considered through independent research, observation, and discussion. 3 units. Second semester. *W, 2:15 and arranged.*

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A wide range of graduate work in Education leading to the various credentials as well as to the degree of Master of Arts is offered under the auspices of the Claremont Graduate School.

English

English 1 or its equivalent is prerequisite for all other departmental courses. English 50 and History 1 are required of all students intending to concentrate in the Department of English.

A reading knowledge of at least one language and literature other than English, as well as high school preparation in Latin, is strongly recommended. In most graduate schools, candidates for the degree of Doctor of Philosophy are required to have a reading knowledge of *two* foreign languages.

Electives should be chosen, in consultation with the adviser, from courses in Speech and Dramatics, foreign literature, the history of England, the history of philosophy, and (especially for students interested in writing) elementary applied art.

Transfer students may offer equivalent courses pursued at other colleges in fulfillment of these requirements and recommendations.

CONCENTRATION WITH EMPHASIS ON LITERATURE

Students who are concentrating in literature must choose from each of the four groups below at least the number of units specified. (Students who graduate before September, 1954, may elect to follow a slightly different distribution of courses described in the *Catalog* for 1952-53.)

Group I (6 units): ENGLISH 153 or 154 or 155.

Group II (9 units): ENGLISH 101 or 103 or 104.

Group III (6 units): ENGLISH 105 or 192 or 193.

Group IV (6 units): ENGLISH 194 and 195.

A brief reading list, designed to acquaint students with the major figures in literature, will supplement course assignments in the program of concentration. The books on this list, many of which will already have been read in course, will be included in the comprehensive examination.

CONCENTRATION WITH EMPHASIS ON WRITING

The following pattern of courses must be completed, for a total of at least 17 units, by students concentrating in writing. (Students who graduate before September, 1954, may elect to follow a slightly different distribution of courses prescribed in the *catalog* for 1952-53.)

1. Upper-division courses in composition (111, 151; Speech and Dramatics 12): 6 to 12 units. Note that certain courses in composition may be repeated for credit under proper conditions.

2. English 153 or 154 or 155: 6 units.

3. English 101 or 103 or 104 or 105: 9 units.

4. English 192 and 193: 6 units.

A course in elementary applied art, taken in the Freshman or Sophomore year, is strongly recommended to students who intend to concentrate with an emphasis on writing.

A list of readings, stressing the principles of literary criticism and illustrating the theory and techniques of writing, will supplement regular coursework in this program of concentration.

Information concerning Honors programs and projected graduate work in English may be had from the Departmental Staff.

IC 1. ENGLISH FOR FOREIGN STUDENTS. A review course in reading, composition, and grammar, with special emphasis on vocabulary and idiom. Required of foreign students who do not pass an examination in written English. The course will be followed in the second semester by a special section of English 1. No units. *TThS*, 8.

1, 1b. ENGLISH: AN INTRODUCTORY COURSE. *Departmental Staff*. A brief review of the fundamentals of composition; instruction and practice in writing; reading and study of a few important literary types. Normally prerequisite for all other departmental courses. Students with marked deficiencies in the use of English may be required to meet for a fourth hour (arranged). 3 units. Section meetings *MWF*, 8, 9; *TThS*, 8, 9. Section of 1b first semester for specially qualified students *TThS*, 9.

50a, 50b. GREAT AUTHORS. *Mrs. Jordan, Mr. Fussell, Mr. Davis, Mr. Razer*. A study of selected works of poetry and prose as representative major contributions to the literature of our cultural heritage. First semester: Chaucer, Milton, readings in the English lyric, selected plays and essays in criticism. Second semester: Wordsworth, Browning, Eliot, selected plays, novels, and essays in criticism. No student will be admitted to the second semester of the course who has not completed English 50a or an equivalent. 3 units. *MWF*, 10, 11; *TThS*, 9.

56. INTRODUCTION TO POETRY. *Mr. Holmes.* A study of the principal aims and techniques of poetry. Readings in a wide variety of poetic types. 3 units. First semester. *MWF, 10.*

57. INTRODUCTION TO DRAMA. *Mr. Kocher.* Great plays of various periods from the classic Greek to the present day; as extensive reading as time will permit. 3 units. Second semester. *MWF, 10.*

58. INTRODUCTION TO PROSE FICTION. *Mr. Frazer, Mr. Beatty.* A general survey of important works in prose fiction with emphasis upon selected novels—English, American, and continental—from the eighteenth century to the present. 3 units. First semester: *TThS, 10.* Second semester: *TThS, 9.*

60. NEWS WRITING. *Mr. Overaker.* The writing and presentation of news with special emphasis on daily newspaper practices. A study of ways in which news writing may be used in various occupations. News story assignments and discussions. Enrollment limited to 25 students. 3 units. First semester. *TTh, 1* and third hour arranged.

63. EXPOSITORY WRITING. *Mr. Bracher.* A course in the principal method used in explaining processes, theories, and the results of special investigations. The course is designed to meet the needs of the student who wishes further practice in expository writing, especially the student who is preparing for a career in business or one of the professions, such as law, medicine, or scientific research. Enrollment limited to 25 students. 3 units. Second semester. *T, 1:15-3:05, and Th, 1:15.*

64. NARRATIVE AND DESCRIPTIVE WRITING. *Mr. Frazer, Mr. Mulhauser.* A course for students who, having shown some ability as writers in English or its equivalent, wish to continue with the basic creative problems of narration and description. Laboratory exercises, assigned problems, and discussion. This course is a prerequisite for English 111 and 151. Enrollment limited to 25 students each semester; if the registration for the course exceeds the number, the selection of the students to take the course will be made after the first class meeting. In exceptional circumstances, the course may be repeated for credit by permission of the instructor. 3 units. First semester: *TThS, 9;* second semester, *TThS, 10.*

ADVANCED COURSES

English 1 or an equivalent is prerequisite for all advanced courses in English.

101a, 101b. THE RENAISSANCE IN ENGLAND. *Mr. Strathmann.* English literature of the Renaissance, chiefly non-dramatic, with emphasis upon Renaissance thought and the development of English literary forms. In the first semester the principal writer studied is Spenser; in the second semester, Milton. 3 units. *MWF, 9.*

103a, 103b. LITERATURE OF THE EIGHTEENTH CENTURY. *Mr. Bracher.* A survey of English literature from 1660 to 1800. Main topics: first semester, Restoration drama, neo-classic literary theory, the works of Dryden, Swift

and Pope; second semester, the beginnings of the novel, pre-romantic poetry, Dr. Johnson and his circle. 3 units. *MWF, 9.*

104a, 104b. LITERATURE OF THE NINETEENTH CENTURY. *Mr. Davis, Mr. Mulhauser.* An intensive study of the major poets and prose-writers of the period, with emphasis on literature as (1) an artistic expression of the life, emotions, and ideas of the individual writer, and as (2) a reflection of the important, intellectual, historical, and literary movements of the century. First semester, writers of the Romantic period; second semester, writers of the Victorian period. 3 units *TThS, 9.*

105a, 105b. AMERICAN LITERATURE. *Mrs. Jordan, Mr. Holmes.* An intensive study of the great American writers of the nineteenth century, with emphasis upon the development of a national literary culture. First semester: Cooper, Poe, Emerson, Thoreau, Hawthorne, and Melville. Second semester: Whitman, Dickinson, Mark Twain, Henry James, Dreiser, and Robinson. 3 units. *TThS, 10.*

III. THE SHORT STORY. *Mr. Mulhauser.* Practice in the writing of short stories and sketches. Consideration of the critical principles of the short story and criticism of both student and professional work. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students. Prerequisite: English 64 and permission of the instructor. 3 units. First semester. *T, 1:15-3:05, and Th, 1:15.*

151. CREATIVE WRITING. *Mr. Frazer.* Supervised practice in the forms of creative writing, selected according to the needs and abilities of the students enrolled in the course. (A student who has completed both English 111 and English 151 may repeat one of these courses for credit.) Enrollment limited to 25 students. Prerequisites: English 64 and permission of the instructor. 3 units. Second semester. *T, 1:15-3:05, and Th, 1:15.*

153. CHAUCER. *Mr. Davis.* A study of Chaucer as the outstanding narrative and dramatic poet of the transition from the medieval to the modern world. 3 units. Second semester. *MWF, 10.*

154. THE ENGLISH LANGUAGE. *Mr. Bracher.* A survey of the English language from its origins to the present. Principles of linguistic change, as an aid to the understanding of modern English usage. Especially recommended to prospective teachers. 3 units. First semester. *MWF, 10.*

155a, 155b. SHAKESPEARE. *Mr. Strathmann.* A study of the principal plays and of Shakespeare's career as a dramatist, with attention to the working conditions of the Elizabethan stage and collateral reading in dramatists contemporary with Shakespeare. First semester, mainly comedies and histories; second semester, mainly tragedies. 3 units. *MWF, 11.*

192. CONTEMPORARY NOVELISTS. *Mr. Mulhauser.* A study of the novels of James, Lawrence, Joyce, Woolf, Hemingway and Faulkner, with emphasis upon the principles of narrative art and the philosophical points of view of these novelists. 3 units. First semester. *MWF, 10.*

193. CONTEMPORARY POETS. *Mr. Fussell*. Poets of the twentieth century, Gerard Manley Hopkins to the present, studied in the light of the great poetic tradition. 3 units. Second semester. *MWF, 10.*

194. LITERARY CRITICISM. *Mr. Fussell, Mr. Holmes*. Reading in important documents of literary criticism, chiefly contemporary. Application of critical principles and techniques to selected literary works, such as Donne's poems; a Faulkner novel; a Greek, a Shakespearean, and a modern tragedy. Class discussion and critical papers. 3 units. First semester. Two sections: *WF, 2:15-3:30.*

195. READINGS IN ENGLISH LITERATURE. *Mr. Holmes, Mr. _____*. A seminar open to seniors concentrating in English. Lectures, readings, and reports directed toward a synthesis, on the student's part, of his work in English. 3 units. Second semester. Two sections: *WF, 2:15-3:30.*

196. PROBLEMS OF WRITING. *Mr. Weismiller*. A specialized course in advanced composition; group and individual conferences. Prerequisites: English 64, 111 and 151 and permission of instructor. 1 or 2 units. Second semester, one hour a week. Arranged. (Omitted in 1953-54.)

CHARACTER PRESENTATION IN DRAMATIC LITERATURE. For description see Speech and Dramatics 61a, 61b.

PLAYWRITING. For description see Speech and Dramatics 112a-112b.

AVAILABLE AT SCRIPPS COLLEGE

I-116a, b. SHAKESPEARE. *Mr. Gray, Mr. Hard*. Year course. *MWF, 11.* Credit will not be given for both I-116 and 155.

I-141a, b. AMERICAN SOCIAL LITERATURE. *Mr. Foster*. Year course. *MWF, 11.*

I-144. THE ROMANTIC POETS. Year course. *A.* Credit will not be given for both I-144 and English 104a.

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The opportunity for graduate work in English provided in the Claremont Graduate School is quite extensive. The student who purposes to go on into graduate study is advised to plan his whole course from at least as early as his junior undergraduate year.

Geography

AVAILABLE AT SCRIPPS COLLEGE

V-103. THE NATURAL SETTING OF THE SOUTHWEST. *Miss Smith*. First semester. (Continuation in second semester by permission only.) *TTh, 2:15-4:05.*

Geology

Geology 1 and 2 make up an introductory survey course, designed to give a general appreciation of the features and processes at the earth's surface to the non-technical student. This course is also a prerequisite for most of the more advanced work in the department. The other courses are designed for persons intending to specialize in geology or a related science.

A student concentrating in geology should include courses 1, 2, 59, 102, 110, 112, 181, 182, an approved summer field course, and either 107 or 151. Required in other departments: Mathematics 1, 65; Physics 51; Chemistry 1, and a reading knowledge of German, Spanish or French (German preferred). Geology 161 and Pre-Engineering 7 and 40 are desirable. In exceptional cases courses in biology may be substituted for those in physics and chemistry. Rarely the requirement of a summer field course is waived.

Seniors graduating in geology must write an acceptable thesis based on work done in Geology 181, 182, and take a 2 or 3 hour written examination on the fundamentals of geology, followed by a brief oral examination on topics suggested by the thesis or the examination paper.

Astronomy-Geology Concentration. Required courses: Astronomy 51 and 102; Geology 59, 110, and 112, plus 11 additional upper-division units selected from Astronomy 103 and 180 (or in exceptional cases Astronomy 155 or 156), and Geology 107 and 151. The comprehensive examination will consist of one 3-hour examination in astronomy and one 3-hour examination in geology.

1a-1b. INTRODUCTION TO GEOLOGY. *Mr. Shelton.* A survey of geologic principles and processes, and of earth history. Must be accompanied by Geology 2. 2 units. *MWF, 10.*

1a-2b. LABORATORY AND FIELD TRIPS SUPPLEMENTING GEOLOGY 1a-1b. *Staff.* Open to students who are taking or have taken Geology 1 or its equivalent. Prerequisite for all more advanced courses in geology except 59. Fee \$3.00 each semester. 1 unit. *MW, or Th, 1:15-4:05.*

3. MINERALOGY, INCLUDING CRYSTALLOGRAPHY. *Mr. Woodford.* Prerequisite, high school chemistry or equivalent. Two class and two laboratory periods. Laboratory fee \$4.00. 4 units. First semester. Class *WF, 11*; laboratory, *and F, 1:15-4:05.*

4. ELEMENTARY FIELD GEOLOGY. *Mr. Shelton.* Field methods; geologic mapping; spring recess trip; writing of geologic reports. Prerequisite: Geology 10, completed or in progress. Desirable, Geology 112. Second semester. 2 units. Arranged.

5. FIELD GEOLOGY. *Mr. Shelton.* A summer field course in geologic mapping. 6 units. Prerequisite: Geology 102 and 110.

6a-107b. INVERTEBRATE PALEONTOLOGY. *Mr. Woodford.* Prerequisite, Geology 1 and 2. Two class and one laboratory periods first semester; one

class and two laboratory periods second semester. Laboratory fee \$6.00 each semester. 3 units. Class *MW, 10*; laboratory, arranged.

110. PETROLOGY. *Mr. Woodford.* The study of rocks without the aid of a polarizing microscope. Prerequisite: Geology 1, 2 and 59. Second semester. Two class and two laboratory periods. 4 units. Laboratory fee \$4.00. *WF, 11* laboratory, *T and F, 1:15-4:05*.

112. STRUCTURAL GEOLOGY. *Mr. Shelton.* Structural features of sedimentary igneous and metamorphic rocks; deformation of the earth's crust; practice in laboratory methods dealing with geological problems in three dimensions. Prerequisite: Geology 110. First semester. Two class and one laboratory periods. 3 units. Laboratory fee \$4.00. *TTh 10*; laboratory arranged.

151a-151b. PETROGRAPHY. *Mr. Shelton.* The optical properties of crystals; study of minerals and rocks with the petrographic microscope. Prerequisite: Geology 110. Two class and one laboratory periods first semester; one class and two laboratory periods second semester. Laboratory fee \$5.00 first semester; \$8.00 second semester. 3 units. Arranged.

161a, 161b. ADVANCED GENERAL GEOLOGY. *Mr. Woodford.* History of geology, weathering, sedimentary rocks, geomorphology, geologic time, volcanology, ore deposits. Prerequisites: Geology 110, one year of college mathematics, and physics and chemistry of high school or college grade. Three class periods, or two classes and one laboratory each week. 3 units. Arranged.

181, 182. GEOLOGICAL INVESTIGATION AND RESEARCH. *Staff.* 3 units. Laboratory fee \$4.00 each semester. Arranged.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

203. REGIONAL GEOLOGY. Open to qualified undergraduate students who have obtained the consent of the instructor in charge.

German

A program of concentration in German consists of a minimum of 18 units in courses numbered above 100 and 6 additional units in German or in a related field selected according to the student's needs and interests. Special program for students interested in German Literature, translation, library work, or post graduate work in German can be had from the department.

1a-1b. ELEMENTARY GERMAN. *Mr. Baumann, Miss Wagner,*..... The acquirement of a small working vocabulary. Constant ear-training, and as much practice in speaking as time permits. Daily exercises in reading and writing. The essentials of grammar. Etymology. Comment on German life. 3 units. *MWF, 10, 11; TThS, 10.*

3a-53b. ADVANCED GERMAN. *Mr. Baumann, Miss Wagner*, _____. More advanced German language study through intensive reading of selected German works, with collateral reading in the field of the student's individual interest—terary, social, or scientific. Continued practice in German conversation. Some attention to an understanding of the cultural life of Germany, Austria, and Switzerland. Prerequisite, German 1 or an equivalent. 3 units. *MWF*, 9; *ThS*, 9.

92a, 102b. ADVANCED CONVERSATION, READINGS AND TRANSLATION. *Miss Wagner*. Intensive critical readings of masterpieces of the eighteenth and nineteenth centuries. Drill in written and oral expression. This course is so designed for those interested in translating and summarizing in English reports given in German. Prerequisites, German 53 or equivalent. 3 units. *ThS*, 8.

99a, 109b. GERMAN LITERATURE OF THE NINETEENTH CENTURY. *Miss Wagner*. With special reference to the cultural, economic and political history of Germany. Discussion and papers. Prerequisite, German 53 or equivalent. 3 units. *MWF*, 10. (Omitted in 1953-54.)

113a, 113b. GERMAN CLASSICS OF THE EIGHTEENTH CENTURY. *Miss Wagner*. Study of the outstanding works and personalities of the period with particular attention to the social and political life of Germany. Prerequisite, German 53 or equivalent. 3 units. *ThS*, 9.

158a, 158b. MODERN GERMAN LITERATURE. *Mr. Baumann*. The development of German Literature from 1880 to the present with reference to the political and social changes during that period. 3 units. Second semester. Arranged. (Omitted in 1953-54.)

160a, 160b. SURVEY OF GERMAN LITERATURE. *Mr. Baumann*. The development of German Literature from earliest times to the present. 3 units. Arranged. (160a omitted in 1953-54.)

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Under the auspices of the Claremont Graduate School graduate work is offered in various phases of German Literature with special emphasis on the modern field.

Government

In addition to preparation for more effective citizenship, concentration in Government is suggested for students planning careers in law, teaching, journalism, research, public relations, civil service or the foreign service. The department will gladly advise students regarding opportunities in these fields and will assist in developing programs of study designed to meet basic requirements.

General Requirement: Government 51 and 52 are normally prerequisite for all other courses in the Department. Exceptions should be cleared with the departmental staff.

Lower Division Prerequisites for Concentration: The following courses should be completed by the end of Sophomore year: History 1; Government 51, 52; Economics 51, 52. The introductory course in Sociology is strongly recommended and also the elementary course in statistics and a semester of accounting.

Program of Concentration: A minimum of 24 upper division units in Government, including in each case Government 104, 125, 154, 157, 182, 183, and 6 upper division units from one of these fields: Economics, History, Sociology. These combinations are especially recommended: in Economics 103 and 189 or 104 and 110; in History 107a, b, 113a, b; Sociology 102 and 111. Each student's program shall be arranged in consultation with the departmental staff. A reading and speaking knowledge of at least one modern foreign language is strongly advised, particularly for students having any intention whatever of seeking positions in foreign service or foreign trade.

Junior Transfers: Students transferring to Pomona at the beginning of the Junior year are eligible to concentrate in Government, provided the prerequisites are met before entrance or can be met during the Junior year.

Three Year M.A. Program: Proximity and cooperation between Pomona College and the Claremont Graduate School make it conveniently possible for students so interested to plan, beginning with their junior year, a three year program enabling them to earn both the B.A. and M.A. degrees. In addition, the Claremont Summer Session, sponsored jointly by the four Associated Colleges in Claremont, makes it feasible for those desiring to continue their academic work throughout the year *either* to accelerate their programs *or* to enroll for courses in education that would enable them within the three year period, also to obtain certificates for teaching in the high schools or junior colleges of California. Any student interested in pursuing such a program is invited to confer with the Department.

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AMERICAN ECONOMIC AND POLITICAL INSTITUTIONS

Pomona College believes that its graduates should be familiar with the economic and political foundations of American life. To this end the Department of Economics and Government have organized a year course in American economic and political institutions through which students who cannot take a full year in each subject may nevertheless gain some understanding of both fields. This course combines a semester's study of economics with another semester devoted to American Government and the formal classwork is supplemented by a series of special lectures which all students are expected to attend. These lectures (which are open to other students and faculty as well) are designed to present the insights of persons who have had practical experi-

ence in business and government and the speakers are chosen from leaders in government, industry, finance, labor and law.

That part of the course pertaining to economic institutions (Economics 51) is offered only during the fall term and that pertaining to politics (Government 52) only in the spring but students may begin the course at whichever time best suits their schedules. The combined course may be offered in fulfillment of one of the requirements for distribution in the lower division. For outline of contents and time schedule see regular course descriptions under the respective departments.

GOVERNMENT

Government 51. INTRODUCTION TO POLITICAL SCIENCE. *Staff*. The aims of this course are to survey principles, processes and institutions which are essential for a mature understanding of the problem of government in the modern world; to take note of the mutual interdependence of the several social sciences; and to describe the use of objective methods in political analysis. 3 units. First semester. *MWF, 8, 11; TThS, 9, 10.*

Government 52. AMERICAN GOVERNMENT. *Staff*. A study of the American system of constitutional government, mainly on the national level but with some attention to the powers and functions of states, counties, and cities. Emphasis is given to the U. S. Constitution, democracy, federalism, and the functions of Congress, the Executive Branch and the Federal Courts. May be combined with Economics 51 to enable students who cannot devote more than six hours to the two fields to do some basic work in each. 3 units. First semester: *MWF, 11.* Second semester. *MWF, 8, 11; TThS, 8, 9, 10.*

Advanced Courses

Government 51 and 52 together comprise the foundation course in government and are normally prerequisites for all advanced courses. Exceptions should be cleared with the departmental staff. Required of all majors in government or international relations.

53. STATE AND LOCAL GOVERNMENT. *Mr. Vieg.* An examination of trends and problems, both political and administrative, in state and local government, with particular reference to California. Special attention given to needs of students interested in education and municipal management. 3 units. First semester. *TThS, 8.*

54. PRINCIPLES OF ADMINISTRATION. *Mr. Vieg.* A study of the forms and modes of responsible administration in American government including the theory and practice of organization, fiscal and personnel management, measurement of administrative efficiency, public relations and comparisons with business management. 3 units. Second semester. *MWF, 9.*

55. INTRODUCTION TO LAW. *Mr. Lee.* The nature of law, public and private, with emphasis upon cases and materials illustrating the development of Anglo-

American institutions. Some attention to theories of law or jurisprudence. A background for the professional study of law. 3 units. First semester. *MWF, 10.* (Omitted in 1953-54; to be offered in 1954-55.)

106. BUSINESS LAW. *Staff.* A survey of the law of contracts, agency, sales, negotiable instruments and other matters normally arising in the course of business. 3 units. First semester. *MWF, 8.* (Omitted in 1953-54.)

125. MODERN DEMOCRACIES. *Mr. Olson.* A comparative study of political institutions in contemporary democratic states, emphasizing Great Britain and the Commonwealth, France, West Germany and Switzerland. 3 units. First semester. *TThS, 10.*

126. SOVIET IDEOLOGY AND INSTITUTIONS. *Mr. Olson.* Evolution of the politics, economics and diplomacy of the U.S.S.R. since 1917, with emphasis upon analysis of the assumptions, institutions and processes of the Soviet system. 3 units. Second semester. *TThS, 10.*

154. AMERICAN CONSTITUTIONAL LAW. *Mr. Lee.* An analytical and historical examination of the nature and extent of constitutional power in the United States. The separation of powers doctrine; federal-state relations; the powers of Congress and the President; constitutional guarantees of the rights of individuals; suffrage, citizenship, and the civil liberties—religion, speech and press. Principal emphasis will be placed on Supreme Court cases. 3 units. Second semester. *TThS, 10.*

157. PARTIES AND PRESSURE GROUPS. *Mr. Vieg.* A study of the role of parties and pressure groups in democratic government, the nature of the American party-lobby system, party platforms and leaders, tactics of pressure groups and the problem of civic indifference. 3 units. First semester. *MWF, 9.*

158. THE LEGISLATIVE PROCESS. *Mr. McDonald.* An analysis of the influences and processes involved in the formation of public policy, primarily with reference to the United States national government. The capacity of modern legislatures to cope with contemporary problems. The roles of executive leadership and administrative rule-making and adjudication. 3 units. Second semester. *TThS, 8.*

161, 162. READINGS AND RESEARCH IN GOVERNMENT. *Staff.* Reading programs for students capable of independent study in fields of special interest not included within the scope of regular courses including, when opportunity offers, research in nearby governmental agencies. Each program must be approved in advance by some member of the Departmental staff. 2 or 3 units. Arranged.

165. AMERICAN FOREIGN RELATIONS. *Mr. Olson.* A study of the principal aspects and problems of American diplomacy since the Revolution, with special emphasis upon the period since 1900 and the formulation, content and direction of policy at the present time. Attention will be given to the role played by the Executive and the Congress in the conduct of foreign affairs. 3 units. Second semester. *TThS, 9.*

57. INTERNATIONAL POLITICS AND ORGANIZATION. *Mr. Olson.* Analysis of the intentions, capabilities and relations of the significant Powers in world politics, and an examination of the purposes, organization and effectiveness of the United Nations, the North Atlantic Treaty Organization and other arrangements for collective security. 3 units. First semester. *TThS, 9.*

30. COMPARATIVE AMERICAN INSTITUTIONS. *Mr. McDonald.* Through discussions, lectures, and selected readings, an analysis and evaluation of certain institutional components of American society—religious, educational, economic, etc. Institutions as cause and as effect of characteristic American behavior. 3 units. Second semester. *MWF, 10.*

31. AMERICAN POLITICAL THOUGHT. *Mr. McDonald.* A study of the development of political ideas in America from colonial times to the present. 3 units. First semester. *MWF, 10.*

32. HISTORY OF POLITICAL THOUGHT. *Mr. McDonald.* A study of the major political philosophers in Western civilization from Plato to Burke. 3 units. First semester. *MWF, 11.*

33. PHILOSOPHY AND SCIENCE OF GOVERNMENT. *Mr. Lee and Mr. Vieg.* A survey of political theory from the Utilitarians to the present; a review of politics, administration, and public law; and an analysis of scientific method in social study. 3 units. Second semester. *MWF, 11.*

Honors Study

Students of marked capacity are invited to arrange with the Department for enrollment in programs of independent study culminating in the presentation of a dissertation on some subject of special interest and significance. One half the minimum requirement of 12 units may be met by Government 182 and 183 which together constitute the Senior seminar.

STATISTICS FOR SOCIAL SCIENTISTS. For description see Economics 57.

AVAILABLE AT CLAREMONT MEN'S COLLEGE

ADMINISTRATIVE ORGANIZATION IN BUSINESS AND GOVERNMENT. *Mr. Benson.* 3 units. Second semester.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

Open to qualified seniors with the consent of the instructor. For other graduate courses, consult the catalog of The Claremont Graduate School.

30. POLITICS AND LEGISLATION. First semester.

32. PUBLIC OPINION AND PUBLIC POLICY. *Mr. Lee.* 3 units. Second semester. *W, 3-5:30.*

History

General requirement: History 1, or its equivalent, is a prerequisite for all other courses in history.

Concentration requirements: Students planning to concentrate in History are required to take History 1, 55, 140 and 190, as well as one semester of a proseminar in History. They should also take Government 51, 52 and Economics 51, 52 during the Freshman and Sophomore years. During Junior and Senior years, in addition to History 140, History 190, and the proseminar, they are required to take at least 12 additional units of upper division courses in History, and at least 6 units of upper division courses in a related field such as Economics, Government, Sociology, Religion, Literature, or Philosophy. A knowledge of foreign languages is of great value to students of history, and all concentrators are urged to achieve such proficiency. Most graduate schools require a reading knowledge of one foreign language for the M.A. and of two for the Ph.D. The courses in any program of concentration should be carefully integrated, and should be planned in consultation with a member of the History Department. All concentrators in History will write three examinations of a comprehensive nature near the end of Senior year. One of these will be the same for all concentrators in History, and will deal with the field as a whole, its point of view and method. In addition, each concentrator will select two from the following subjects in which to be examined: Ancient History; Europe, 312-1648; Europe since 1648; the United States; Latin America; the Far East.

Honors requirements: A student admitted to Honors Study in the Social Sciences with History as his major field will, in addition to the program of reading and conferences arranged with the member of the department who acts as his adviser, participate in a seminar including the departmental faculty and students in Honors, which will meet for the presentation of reports and discussion. Juniors will register for 141; Seniors will register for 191. An Honors thesis is required of all students in this program, and, near the end of Senior year, there will be a series of written comprehensive examinations in the major and minor fields as well as an oral examination.

12-1b. THE DEVELOPMENT OF WESTERN CIVILIZATION. *The Departmental Staff.* The evolution of civilization in Europe from antiquity to the contemporary scene, and its spread throughout the world. Attention is paid to the political, religious, intellectual, and economic forces of change. The aim is to lay a foundation for the understanding of contemporary problems. 3 units. *MWF, 8, 9; TThS, 8, 9.*

22-2b. ASIA AND EUROPE. *Mr. Ch'en.* A survey, not of Oriental civilization, but of Eastern contacts with and contributions to Western Civilization with emphasis upon the interdependence of cultures. Open to students currently enrolled in History 12-a. 1 unit. Fortnightly meetings, *M, 7:15-9:00 p.m.*

55a, 55b. HISTORY OF THE UNITED STATES. *Mr. Kemble.* The political, economic, and cultural development of the United States from its beginning

as an outpost of European expansion to a position of independence and world influence. 3 units. *MWF, 11.*

101. HISTORY OF GREECE. *Mr. Carroll.* A survey of ancient Greece from the prehistoric age until the Roman conquest, with special emphasis on the development and decay of the city-state and of Athenian democracy. The social, economic, and intellectual history of the period will be considered within the political frame of reference. 3 units. Second semester. *MWF, 9.* (Offered in alternate years; omitted in 1954-55.)

102. HISTORY OF ROME. *Mr. Carroll.* A study of Rome from the beginnings of the city to the disappearance of the Empire. There will be special attention to the problems of imperial administration, the causes of the decline of the Empire, and the emergence of Christianity. 3 units. Second semester. *MWF, 9.* (Offered in alternate years; omitted in 1953-54.)

103a, 103b. HISTORY OF THE MIDDLE AGES. *Mr. Larnihan.* History of Europe from Constantine to Charles V, with special emphasis on the economic, political, intellectual, and religious developments and the institutions and ideals underlying the transition from Mediterranean to European civilization. The first semester covers the period 312-1054; the second semester 1054-1500. 3 units. *TThS, 9.* (Offered in alternate years; omitted in 1954-55.)

107a, 107b. HISTORY OF ENGLAND. *Mr. Gleason.* The development of the main features of civilization in the British Isles. Emphasis is laid upon the evolution of religious, intellectual, and economic forms as well as the growth of political institutions. Thus the course is largely a study of the cultural heritage of America. First semester, Great Britain to 1688. Second semester, Great Britain since 1688. (May be taken as a semester course). 3 units. *MWF, 11.*

112a, 112b. THE AGES OF ENLIGHTENMENT, AND REVOLUTION. *Mr. Smith.* An analysis of social, economic, political and cultural developments in Europe from 1648 to 1815 with France as a focal point. First semester: the periods of absolutism and enlightenment. Second semester: the French Revolution and the Napoleonic era. 3 units. *TThS, 10.*

113a, 113b. EUROPE SINCE 1870. *Mr. Meyer.* Political, economic, social, and intellectual developments will be studied with reference both to their intrinsic significance and to an understanding of contemporary Europe. Open to Sophomores who satisfy the instructor with regard to their preparation. 3 units. *MWF, 10.*

114. HISTORY OF RUSSIA. *Mr. Gleason.* A survey of Russian political, economic, and cultural history to 1917. This course may be followed by Government 126 to constitute a year's work in Russian History. 3 units. First semester. (Offered in alternate years; to be omitted in 1953-54.) *TThS, 10.*

117a, 117b. INTELLECTUAL HISTORY OF EUROPE. *Mr. Larnihan.* A study of the formation of the ideas and ideals significant in politics, religion, and science since classical times, their expression in literature and institutions, and their influence on the development of society. (Offered in alternate years; to be omitted in 1953-54.) *MWF, 9.*

120. THE WESTWARD MOVEMENT IN NORTH AMERICA. *Mr. Bradley.* A study of the migration of people, institutions, and ideas across the continent, from the establishment of the English colonies to the twentieth century. Some attention will be given to the parallel and overlapping movement of population in Canada. 3 units. Second semester. *MWF, 9.*

123a, 123b. HISTORY OF LATIN AMERICA. *Mr. Herring.* The Indian and colonial backgrounds; the development of the twenty independent republics to the present day, with emphasis upon Mexico, Brazil, Argentina, Chile and Colombia. 3 units. *W, 7:30-9:45 p.m.*

127a, 127b. STUDIES IN LATIN AMERICAN BIOGRAPHY. *Mr. Herring.* Reports on the lives of some of the chief figures in the history of Latin America. To be elected only in conjunction with History 123a, b. 1 unit. *W, 5-6 p.m.*

128a, 128b. INTER-AMERICAN RELATIONS. *Mr. Herring.* Diplomatic, economic and cultural relations between the United States and Latin America from 1800 to the present time. 3 units. *Th, 7:30-9:45 p.m.*

130. MODERN MARITIME AND NAVAL HISTORY. *Mr. Kemble.* A study of the development of sea power and commerce from the sixteenth century to the present. The growth and character of the great mercantile marines, the evolution of naval architecture, and the course and character of war at sea will be considered. 3 units. Second semester. *MWF, 10.* (Offered in alternate years; omitted in 1954-55.)

140. THE STUDY OF HISTORY. *Mr. Learnihan.* An introduction to the mature study of history. Topics to be considered will include: the philosophy of history, schools of historical writing, historical bibliography, the techniques of historical investigation, evidence and its interpretation. The course is designed and required for concentrators in history in the first term of Junior year, but other Junior and Senior students may be admitted with the permission of the instructor. 3 units. First semester. *TTh, 2:15-3:45.*

141a, 141b. HISTORY AND HISTORIANS. *The Departmental Staff.* A consideration of the theory and interpretation of History through the reading of a selected group of great historical classics, and a study of the development of historiography. Open only to students admitted to Honors Study in History, except by special arrangement with the department. 3 units. *T, 7:30-9:30 p.m.*

190. HISTORICAL PROBLEMS AND INTERPRETATION. *Mr. Meyer.* Readings and discussion of important aspects of European and American history. Consideration of major historical developments and some of the most significant works dealing with the several fields of History. The course is designed and required for Seniors concentrating in History. Other Seniors may be admitted with the permission of the instructor. 3 units. Second semester. *F, 2:15-3:45* and arranged.

191a, 191b. SELECTED TOPICS FOR HISTORICAL INVESTIGATION. *The Departmental Staff.* Open only to students admitted to Honors Study in History except by special arrangement with the department. 3 units. *T, 7:30-9:30 p.m.*

PRO-SEMINARS

The following courses are designed primarily for concentrators in history. Other students will be admitted with the permission of the instructor. It is intended to offer at least one pro-seminar in European and one in United States history each year, but the subjects studied may vary from time to time. Similar instruction in the history of Latin America and the Far East is available for Pomona Seniors in the offerings of Claremont Graduate School.

162. HISTORY OF THE RENAISSANCE AND REFORMATION. *Mr. Gleason*. An analysis of the transition from Medieval to Modern Civilization. Intellectual, social, economic, and particularly religious developments will be studied from their early manifestations in fourteenth century Italy to their culmination in northwestern Europe in the seventeenth century. 3 units. Second semester. (Offered in alternate years; omitted in 1954-55.) *MW*, 2:15 and arranged.

168. CONTEMPORARY MIDDLE EUROPE. *Mr. Meyer*. The effects of the two world wars upon mid-European society, and the struggle for supremacy between democracy, fascism, and communism. 3 units. First semester. (Offered in alternate years; omitted in 1954-55.) *MWF*, 9.

170. HISTORY OF WESTERN AMERICA. *Mr. Kemble*. The exploration, economic exploitation, and settlement of Western North America by Spaniards, Russians, and Anglo-Americans. Attention is given to the evolution of political, cultural, and economic institutions, and the opening of routes of communication. Lectures and directed research in the splendid materials contained in the Henry R. Wagner Collection of History and Cartography of the North Pacific and the Mason Library of California and Western American History. 3 units. First semester. (Offered in alternate years; omitted in 1954-55.) *MW*, 2:15 and arranged.

172. AMERICAN CIVILIZATION, 1763-1828. *Mr. Kemble*. A study of significant aspects of American political, economic, and intellectual history, between the closing years of the Colonial Period and the Age of Jackson. 3 units. First semester. *MW*, 2:15 and arranged. (Offered in alternate years; omitted in 1953-54.)

HISTORY OF CHINA. For description see Oriental Affairs 103a, 103b.

JAPANESE HISTORY AND CULTURE. For description see Oriental Affairs 111.

RELIGION IN EARLY AMERICAN CULTURE. For description see Religion 159.

AVAILABLE AT SCRIPPS COLLEGE

III-100. ECONOMIC CHANGE IN THE UNITED STATES. *Mr. Britt*. Year course. *TTh*, 10 and arranged.

III-117. AMERICAN SOCIAL HISTORY. *Mr. White*. Year course. *T*, 9; *Th*, 9-11.

V-114. PROGRESS AND MEANING OF THE SCIENCES. *Miss Smith*. Year course. Arranged hours.

SENIOR HUMANITIES. *Staff*. Discussion of the contemporary American scene. Year course. *MWF*, 9.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

These offerings are designed primarily for graduate students, but are open to qualified Seniors by permission of the chairman of the department and the instructor.

201. STUDIES IN EUROPE SINCE 1914. *Mr. Cooke*. Second semester. 5 units. *W, 4-6 and 7:30-9:30 p.m.*
209. AMERICAN DIPLOMATIC HISTORY. *Mr. Cooke*. First semester. 5 units. *W, 4-6 and 7:30-9:30 p.m.*
- 227a, 227b. THE UNITED STATES IN THE NINETEENTH CENTURY. *Mr. Bradley*. 5 units. *MTh, 8-10 p.m.*
236. HISTORICAL LITERATURE IN THE UNITED STATES. *Mr. Bradley*. Second semester. Arranged.

Mathematics

Requirements for concentration: In addition to the basic courses of Mathematics 1a, b or 52, and 65a, b, it is necessary to take the following courses: Mathematics 118, 119, 125, 151a, b, and at least three more upper division or graduate units in the department of Mathematics. The remaining six units may be taken in Mathematics or selected from Physics 113a-b, 191a, b, Astronomy 155.

Mathematics 1a, b is normally prerequisite for all other work in the department. Students who have had trigonometry in high school may take an examination in mathematics on the Saturday preceding registration. If a satisfactory grade is made on this examination, the student may enroll in Mathematics 52 if he so desires.

1a, 1b. INTRODUCTION TO COLLEGE MATHEMATICS. *Departmental Staff*. While this course prepares students for work in the calculus, it is at the same time comprehensive enough to provide in itself a general mathematical background. It is designed for students who have not had trigonometry, but is open to students who do not wish or are not able to qualify for the alternative described above. It includes college algebra, trigonometry, and an introduction to analytic geometry and calculus. 3 units. *MWF, 9, 10, 11.*

52. PLANE ANALYTIC GEOMETRY. *Mr. Tolsted*. First semester: straight line, conic sections, higher plane curves in various coordinated systems. Credit will not be given for both Mathematics 1 and 52. 3 units. *MWF, 11.*

65a, 65b. DIFFERENTIAL AND INTEGRAL CALCULUS. *Staff*. This is a standard course in the theory and application of the calculus. Prerequisite Mathematics 1 or 52. 3 units. *MWF, 9; TThS, 9.* A section of Mathematics 65b will be offered first semester, *MWF, 9*, and a section of 65a second semester, *MWF, 11.*

118. HIGHER ALGEBRA. *Mr. Jaeger*. Permutations, combinations, probability, binomial and multinomial theorems, summation of series, and other algebraic topics. Prerequisite Mathematics 65 or permission of instructor. 3 units. First semester. *TThS, 10.*

119. THEORY OF EQUATIONS. *Mr. Jaeger.* The theory and solution of algebraic and transcendental equations; determinants and matrices. Prerequisite Mathematics 65 or permission of instructor. 3 units. Second semester, *TThS*, 10.

125. INTERMEDIATE CALCULUS. *Mr. Hamilton.* Topics not taken up in Mathematics 65, with special emphasis on multiple integrals, partial differentiation, and series with applications of each of these. Prerequisite Mathematics 65. 3 units. Second semester. *MWF*, 9.

151a, 151b. DIFFERENTIAL EQUATIONS. *Mr. Hamilton.* A general course in the theory, solution, and application of differential equations. Mathematics 125 must be taken before or concurrently with this course. 3 units. *MWF*, 8.

152a, 152b. ADVANCED CALCULUS. *Mr. Tolsted.* Limits, sequences, continuity, improper integrals, uniform convergences, Taylor and Fourier series, partial derivatives, multiple integrals, line and surface integrals, Green and Stokes Theorems. 3 units. *TThS*, 9.

185. VECTOR ANALYSIS. *Mr. Hamilton.* Algebra and calculus of vectors; divergence and Stokes' theorems. 3 units. First semester. *MWF*, 11.

194. MATHEMATICAL STATISTICS. *Mr. Hamilton.* The mathematical basis for statistical theories and methods with applications from various fields. Prerequisite, Mathematics 65a, b. 3 units. Second semester. *MWF*, 10.

195a, 195b. ACTUARIAL MATHEMATICS. *Mr. Jaeger.* Finite differences, interpolation formulas, approximations, summations, probability. Prerequisite Mathematics 65 and 118. 3 units. Arranged.

198a, 198b. SELECTED TOPICS IN HIGHER MATHEMATICS. *Staff.* Special work or reading not included in the preceding will be offered in this course. 3 units. Arranged.

MATHEMATICAL PHYSICS. For description see Physics 191a-191b.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

The following courses, listed among the offerings of the Claremont Graduate School, are open to superior undergraduates who have satisfied the prerequisites.

200a, 200b. NUMBER THEORY. *Mr. Jaeger.* Properties of integers, linear and quadratic congruences, and algebraic numbers. Prerequisite Mathematics 65. 3 units. *MWF*, 10.

The following courses are usually given as reading courses. The demand will determine which will be given.

205a, 205b. DIFFERENTIAL GEOMETRY. *Mr. Tolsted.* The study of curves and surfaces in three dimensional Euclidean space, introducing the tensor calculus (the principal mathematical tool in the study of the theory of relativity). Prerequisites Mathematics 52b or equivalent and Mathematics 152. 3 units. Arranged.

210a, 210b. COMPLEX VARIABLE. *Mr. Hamilton.* Algebra and calculus of complex variables; infinite series; Cauchy's Theorem and consequences, including Taylor and Laurent expansions and classification of singularities; entire functions; meromorphic functions. Prerequisite, Mathematics 152. units. Arranged.

PRE-ENGINEERING

In the following courses three hours of work per week are required for each unit. It is necessary that the student attend class on the hour agreed upon for the lecture, but it is not mandatory that the laboratory work be done in one or two periods. Credit will not be given for only 1 unit of work.

The letters a, b, c, d, refer to units of work, each letter being associated with one unit. All units are available each semester. A student may enroll in any unit for which he is qualified.

7a, 7b, 7c, 7d. ENGINEERING DRAWING. A beginning course in mechanical drawing and applied geometry. Includes lettering, orthographic projection, visualization of simple objects, and making working drawings of machine assemblies. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

40a, 40b, 40c, 40d. DESCRIPTIVE GEOMETRY. Prerequisite: Engineering Drawing 7a and 7b, or previous drawing experience. Theory and principles of projection including points, lines, planes, shades and shadows, plane sections and development of surfaces, and intersections of surfaces. Practical problems from the student's chosen field will be given towards the end of 40d. 1 or 2 units per semester. For a well rounded course 40a should be taken immediately after Engineering Drawing 7. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

101a, 101b, 101c, 101d. ARCHITECTURE. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, and sufficient knowledge of physics that the student is at least conversant with the subjects of mechanics, heat, sound, electricity, and light. Basic work in architectural design including consideration of construction details, materials, wiring, lighting, plumbing, and heating. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

102a, 102b, 102c, 102d. MECHANISMS. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, Physics 51a. Practice in the graphical solution of structures, gears, cams, and machine mechanisms, using the principles of statics and kinematics. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

103a, 103b, 103c, 103d. TOPOGRAPHICAL DRAFTING. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b. Practice in the making of topographical maps and the construction of models. 1 or 2 units per semester. Study and drawing period *MTWTh* or *F*, 1:15-4; lecture hour arranged.

104a, 104b, 104c, 104d. PRODUCTION ILLUSTRATION. Mr. Prerequisite: Engineering Drawing 7a, 7b, 40a, 40b, 40c, 40d. Practice in the making of isometric, oblique, and diametric sketches and drawings including the use of special instruments. 1 or 2 units per semester. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged.

105a, 105b, 105c, 105d. DESIGN OF MACHINE ELEMENTS. Prerequisite: Engineering Drawing 102a, 102b, 102c, 102d. The design of machines from the student's chosen field. 2 units per semester. Study and drawing period MTWTh or F, 1:15-4; lecture hour arranged.

AVAILABLE AT CLAREMONT SUMMER SESSION

60. SURVEYING. Mr. Grimm. 3 units. Offered in Claremont Summer Session.

Military Science

Pomona College, in conjunction with Claremont Men's College, maintains a Branch General Unit, Senior Division, of the Reserve Officers' Training Corps, established under the National Defense Act for the purpose of training students to become officers of the Army of the United States. The general purpose of the ROTC is to provide officers for the United States Army Reserve; it also now constitutes a principal source of procurement of junior officers for the Regular Army. Those students who successfully complete the four year course will be appointed second lieutenants in the United States Army Reserve. Those students who demonstrate special aptitude or proficiency will be offered an opportunity for an appointment as a second lieutenant in the Regular Army.

The Branch General ROTC program consists of subjects and material general in nature and scope so the Department of the Army may appoint second lieutenants in the combat, administrative and technical services of the Army. During the early part of the 1st Year Advanced Course, students will state a preference for the branch of service desired. The Military Department Staff and a college representative will then interview and recommend to the Department of the Army the student's future assignment. These recommendations will be considered by the Department of the Army on a nationwide selection basis and the requirements of the Army. A final decision will be rendered to the student on his assigned branch of service by the Department of the Army.

The courses include both classroom and out-of-doors instruction. One drill period a week provides an opportunity for the practical application of command and assists in the improvement of the posture and physical coordination of the student. Special emphasis is placed on the development of the qualities of leadership throughout the course.

The instructors in the department are officers of the United States Army assigned for duty at the college by the Department of the Army. The most modern weapons, equipment and types of instructional material are furnished to give the students practical experience in handling such equipment.

The four year program is divided into the Basic Course and the Advanced Course. The Basic Course consists of Military Science I and II, covering two year period. The ROTC Summer Camp is attended during the vacation between the 1st and 2nd year Advanced Course for a period of six (6) weeks. Enrollment in the Basic Course is on a voluntary basis. Enrollment in the Advanced Course is on a selective basis. After a student has enrolled in either course, the completion of the second year of that particular course becomes a prerequisite for graduation.

Normally, the four year program for an incoming freshman without prior military service or prior ROTC training would be as follows:

Freshman Year	1st Year Basic ROTC Course	MS I
Sophomore Year	2nd Year Basic ROTC Course	MS II
Junior Year	1st Year Advanced ROTC Course	MS III
Summer Vacation	ROTC Summer Camp (6 weeks)	
Senior Year	2nd Year Advanced ROTC Course	MS IV
Graduation	Appointment as 2nd Lieutenant United States Army Reserve	

The Basic Course is open to all physically fit male students who are United States citizens. ROTC enrollment does not interfere with participation in sports by students nor in other college activities. Uniforms, equipment and textbooks for the courses are issued to the students without charge.

Previous military service furnishes a basis for credit for Basic Course instruction according to the individual's length of service, type of training, and honorable discharge from the Armed Forces of the United States. Credit toward Advanced standing in ROTC is also permitted for prior Senior or Junior ROTC training in certain cases. Application for advanced standing must be made during registration, and honorable discharge from the Armed Forces or certificates showing successful completion of ROTC courses at other schools should be presented at that time.

Enrollment in the Advanced Course (MS III and MS IV) is limited to selected members who have completed the Basic Course, or have received equivalent credit. A student entering the Advanced Course must sign an agreement with the United States Government that he will devote five (5) class hours per week to Military Science during the academic year, that he will attend a ROTC Summer Camp of six (6) weeks duration between his MS III and MS IV courses, and that he will accept an appointment as second lieutenant in the United States Army Reserve, if tendered. In consideration of this agreement, students receive cash allowances from the government equivalent to a scholarship of about \$635.00 for the two (2) year period of the Advanced Course.

Students are required to attend a ROTC Summer Camp during the summer between the MS III and MS IV courses. The Summer Camp is usually of six weeks duration from the middle of June to the first part of August. Exact dates

and locations of such camps are announced during the latter part of the academic year. All necessary expenses in connection with the training camp, including transportation to and from camp, food, housing, pay, uniforms and medical attention are provided by the government. Each student will attend ROTC Summer Camp of his assigned branch of service as determined by the Department of the Army.

Regularly enrolled ROTC students may be deferred from induction and service under current regulations. Students so deferred must agree to complete the Basic Course, if enrolled therein; to enroll in and complete the Advanced Course if accepted therefor; and upon completion of the Advanced Course of instruction, to accept a commission, if tendered; to serve on active duty for a period of not less than two (2) years after receipt of such commission, subject to order by the Secretary of the Army and to remain a member of a Regular or Reserve Component of the Army until the eighth anniversary of the receipt of his commission unless sooner terminated. This length of service, which is the same for every physically qualified US male citizen, can be in any combination so that any part, but not less than twenty-four (24) consecutive months, of the eight years may be served on active duty and the balance in the Reserve Component.

Graduating students who have maintained a high standing in military subjects may if they have demonstrated leadership ability, military aptitude and academic proficiency, be designated by the Professor of Military Science and Tactics as, "Distinguished Military Students." The Senior ROTC program will provide the principal source of procurement of junior officers for the Regular Army through selection of Distinguished Military Graduates of the Senior ROTC Units for direct Regular Army appointment.

1a-1b. MILITARY SCIENCE COURSE I. (Basic Course). *Staff*. History of the Army, its Mission and Organization; First Aid and Individual Hygiene; Map Reading; Individual Weapons and Marksmanship; Small Unit Tactics; and School of the Soldier (Drill). 2 units. Class *TTh*, 8, 9 or 10; drill, *M*, 1:15-2:05.

2a-52b. MILITARY SCIENCE COURSE II (Basic Course). *Staff*. History of the Army, Its Mission and Organization; Light Crew-served Weapons; Mortars and Grenades; Map and Aerial Photograph Reading; Communication; Motor Transportation; and School of the Soldier (Drill) 2 units. Class *TTh*, 8, 9 or 10; drill, *M*, 1:15-2:05.

103a-103b. MILITARY SCIENCE COURSE III (Advanced Course). *Staff*. History of the Army, Its Mission and Organization; Estimate of the Situation and Combat Orders; Small Unit Tactics; Unit Hygiene and Field Sanitation; Communication; Field Fortifications and Camouflage; Military Intelligence; Heavy Crew-served Weapons; Gunnery; Marksmanship; Mine Warfare; Military Teaching Methods; Leadership. 3 units. Class, *MWF*, 8, 9; *F*, 11, 1:15; drill *M*, 1:15-2:05.

40c. MILITARY SCIENCE ROTC SUMMER CAMP. (Advanced Course) *Camp Staff*. Branch tactics and techniques; marches and bivouacs; drills and parades;

physical training and athletics; subjects pertinent to branch to which student is assigned. 3 units. Six weeks in June and July at camp to be designated. credit will be granted after 1953.

154a-154b. MILITARY SCIENCE COURSE IV (Advanced Course). *Staff.* History of the Army, Its Mission and Organization; The Military Team; Organization and Functions of the Technical and Administrative Services; Guerrilla Warfare; Command and Staff; Military Law; Military Administration; Supply and Evacuation; Leadership. 3 units. Class, *MWF, 8, 9; F, 11, 1:15*; drill *1:15-2:05*.

Music

Recognizing a dual function in its educational approach, the Music Department endeavors to meet the needs of both the general and the pre-professional student. It offers to the first type a wide selection of both participating and non-participating courses, in order to aid him in giving music a place of importance in his future cultural life and experience. To the second type, who enter the music profession as teachers and performers, the music concentration program affords a thorough and broad pre-professional training, leading to graduate study.

Requirements for concentration: The following courses are required of students concentrating in music: Music 1, 2, 55, 56, 104, 107, 159, and 163. Students transferring from other institutions as upper-classmen should take the equivalent of the Lower Division courses (those under 100) before coming to Pomona. Freshmen and transfer students will take a placement test in music theory*; information concerning this test may be obtained from the Music Department.

Students must elect one of four areas of concentration before the junior year. Each of these areas will include the courses required of all students (listed above) as well as certain other courses as follows:

Composition: Music 113 and 158.

History: A choice of two of the following—Music 103, 160 and 163.

Applied Music: Music 11, 61, 111, and 161.

General Music Concentration: A choice of any of the offerings of the Department that will include Applied Music, Group Activities, and Upper Division theory and history courses; this work must include 8 hours of Upper Division units.

The Music Major who intends to meet the State requirements for a General Secondary Credential in Music must plan to take a fifth year college work. In addition to the courses listed above under "Requirements for Concentration," such students should also elect Music 113 (Orchestration), 4 units in Piano, 4 units in Voice, and work in Choir, Band, or Orchestra.

*Transfer credit for previous college theory study will be determined by the result of the placement test.

They must consult with the Department of Education for details about requirements.

Courses open to non-concentrators. The Department of Music offers a variety of courses and musical activities to non-concentrators, including music appreciation (53), theory (4), history (103, 104), and piano literature (112). Vocal and instrumental Applied Music may be taken by the non-concentrator for credit if accompanied or preceded by Music 1 and 2, or Music 4. Group activities open to all students include Choir (57), Orchestra (58), Band (59), and Chamber Music (60).

THEORY, APPRECIATION AND HISTORY

1b. **ELEMENTARY HARMONY.** *Mr. Loucks, Mrs. Briggs.* Thorough grounding in the fundamentals of music through the mediums of hearing, singing, writing, and the keyboard. Study of major and minor modes; all diatonic triads, and seventh chords and all non-chordal tones. Harmonic analysis of melodies. Four-part writing based on the techniques of the 17th and 18th centuries. Prerequisite, knowledge of time signatures, simple key signatures, and ability to read a simple hymn at the piano. Credit for this course is given only when accompanied by 2a-2b. 3 units. *MWF, 9 or 1:15.*

2b. **EAR TRAINING AND SIGHT SINGING.** *Mr. Loucks, Mrs. Briggs.* Training in melodic, rhythmic and harmonic relationships through singing and dictation. Keyboard practice in simple modulations and cadential combinations. To be taken with 1a-1b. 2 hours, 1 unit. *MW, 10 or 1:15; TTh, 10 or 1:15.*

4b. **MATERIALS OF MUSIC.** *Mr. Kohn.* This course is designed to give a thorough elementary understanding of the materials of music—harmony, melody and rhythm—and to develop facility in reading and notating music. Discussion of these materials from a historical as well as a theoretical viewpoint will be part of the course, which aims at the development of the student's comprehension of all the factors that enter into the musical experience. The work will comprise written exercises, sight-singing, supplementary listening, and selected readings. This course is intended for the general student; credit for it may not be counted towards concentration in music. 3 units. *MWF, 10.*

5a-53b. **INTRODUCTION TO MUSIC.** *Mr. Dayton.* Survey of the principal periods in music history from the Renaissance to the present; important composers, trends, forms, and musical aesthetics of each era. Detailed study and analysis of symphony, concerto, opera, chamber music, song and piano literature. A non-technical listening course. No previous musical experience required. 2 units. *MW, 2:15.*

5a-55b. **ADVANCED HARMONY.** *Mr. Loucks, Mr. Kohn.* A study of part-writing technique as found in the Bach Chorales. Chromatic harmony and modulation. Practice in instrumental styles. Prerequisite, Music 1 and 2. Credit for this course is given only when accompanied by 56a-56b. 3 units. *MWF, 10 or 11.*

56a-56b. **ADVANCED EAR TRAINING AND KEYBOARD HARMONY.** *Mr. Loucks, M. Kohn.* Training in the hearing of progressions involving chromatic chords, largely through harmonic dictation. Keyboard work including modulation and sight harmonization of melodies. 2 hours, 1 unit. *MW, 2:15; TTh, 10* arranged.

60a, 60b. **CHAMBER MUSIC.** *Mr. Fiske.* A study of important chamber music literature from the 17th century to the present day through performance and analysis. Course also includes historical study of the works performed. Open only to advanced instrumentalists able to participate in performance. Permission of instructor required. The course may be repeated for credit. 2 units. Arranged.

103a, 103b. **MUSIC IN AMERICAN HISTORY.** *Mr. Fiske.* This course is designed to provide the general student with an understanding of the part music has taken in the social and educational growth of the United States, from the colonial period to the present day. Attention will be given to folk, popular, and art music and their importance in various phases of our national cultural development. Not limited to music students. 3 units. *TThS, 9.* (Offered alternate years; to be omitted in 1953-54.)

104a-104b. **HISTORY OF MUSIC.** *Mr. Fiske.* Intended to familiarize the student with the major trends in the history of music from the early Christian era to the present, with special emphasis on composers, music and developments from the 16th century onward. Considerable attention is given to music problems of the present day. Prerequisite, Music 1 or permission of instructor. 3 units. *TThS, 9.*

107a-107b. **COUNTERPOINT.** *Mr. Loucks.* An analytical study of the Palestrina technique. Two and three-voice writing in free style. Original work in the forms of the classical suite, chorale prelude and variations. Prerequisite, Music 55. 3 units. *TThS, 8.*

112. **PIANO LITERATURE AND REPERTOIRE.** *Mr. Dayton.* A comprehensive survey of the solo, concerto and two-piano literature, including a detailed study of the pianistic styles of Bach, Mozart, Beethoven, Schumann, Chopin, Brahms, Debussy and contemporary composers. Special emphasis on program building and the technique of public performance. Permission of instructor required. 3 units. Second semester. Arranged.

113a-113b. **ORCHESTRATION AND INSTRUMENTATION.** *Mr. Blanchard.* A study of the instruments of the modern orchestra and band, their technical possibilities and limitations. Practical laboratory work in scoring for instrumental groups. Choral arranging for various voice combinations with and without accompaniment. Opportunity will be provided for public performance of outstanding scores. Fundamentals of conducting will be stressed throughout the course. Prerequisite, Music 55. 3 units. *MWF, 9,* or arranged.

131. **CONTEMPORARY MUSIC.** *Mr. Dayton.* 3 units. Arranged.

158a-158b. **FREE COMPOSITION.** Advanced original work in polyphonic and homophonic forms, planned to develop the student's sense of

musical structure and his individual manner of musical expression. Prerequisite, Music 107. 3 units. Arranged.

159a-159b. FORM AND ANALYSIS. *Mr. Blanchard*. Designed to lead to a clear understanding of the principles upon which musical form is based, and to the application of these principles in the works of the great masters of form. Prerequisite, Music 55. 2 units. *TTh, 10*.

160a, 160b. MUSIC OF THE MIDDLE AGES AND THE RENAISSANCE. _____
The first semester deals with the music of the early Christian Church, the Troubadours, the early polyphonic period, and the final flowering of medieval musical art in the "ars nova" of the fourteenth century. The second semester covers the period of the Burgundian School of the fifteenth century through the culmination of the great polyphonic period of Palestrina and Lassus in the late sixteenth century. Prerequisite, Music 104. 3 units. Arranged. (Offered in alternate years. To be omitted in 1953-54.)

163a, 163b. MUSIC OF THE BAROQUE AND CLASSICAL PERIODS. _____. The first semester is concerned with the vocal and instrumental music, both sacred and secular, of the seventeenth century and of the age of Bach and Handel. The second semester deals with the rise of the classical era, and includes a detailed study of certain of the characteristic works of Haydn, Mozart, and Beethoven in various instrumental and vocal mediums. Prerequisite, Music 104. 3 units. Arranged. (Offered in alternate years. To be given in 1953-54.)

195a-195b. MUSIC SEMINAR. *Departmental staff*. Studies in the development of musical styles, designed to aid the student in integrating his previous historical, theoretical and interpretative studies into broad concepts of musical evolution. While the areas covered are grouped for convenience into musical literature, theory and performance practices, emphasis is placed on the inter-relationship of all these phases. Required of all senior majors in music. *F, 2:15*.

APPLIED MUSIC

Credit for individual and class work in Applied Music is open to all students in the college, subject to the following provisions: (1) a total of not more than 16 units of instruction in Applied Music may be counted toward the Bachelor of Arts degree. Credit of 2 units per semester is given for two private lessons weekly, 1 unit per semester for one private lesson weekly. (2) Music 1 and 2 must accompany or precede all credit study. Music 55 and 56 must accompany or precede more than one year of credit study for those taking two lessons weekly.

Those not concentrating in music may obtain credit for one lesson per week upon completion of Music 1 and 2, or Music 4. Students preparing to concentrate in Applied Music are required to take two lessons per week in their major subject and to appear frequently in recitals.

I. APPLIED MUSIC (Freshman level)

I. APPLIED MUSIC (Sophomore level)

II. APPLIED MUSIC (Junior level)

6I. APPLIED MUSIC (Senior level)

No credit is given for work in Applied Music taken elsewhere while the student is enrolled at Pomona College. Transfer of credit from a recognized institution may be granted upon examination and departmental recommendation. All private lessons are one-half hour in length.

VOICE, *Mrs. Briggs*

ORGAN, *Mr. Blanchard*

PIANO, *Mr. Dayton, and Mr. Kohn*

VIOLIN AND VIOLA, *Mr. Fiske, and Miss Smith*

BRASS, *Mr. Tyler*

HARP, *Mrs. Remsen*

VIOLONCELLO, *Miss Jean*

WOODWINDS, *Mr. Gassman, Mr. Stevens, Mr. Kalman, Mr. Bloch*

Lessons on other instruments may be arranged through the office of the Music Department.

Examinations in Applied Music. Examinations, to be given before the entire Music Faculty, are required of all students in Applied Music, as follows:

Qualifying Examination for Lower Division Credit—to be given, normally, at the beginning of the Freshman year to determine eligibility for credit. No credit is given for elementary study.

Qualifying Examination for Upper Division Credit—to be given, normally, at the end of the Sophomore year to obtain faculty recommendation for concentration in Applied Music. Should a student fail to qualify for such recommendation, he may repeat the examination at the beginning of his Junior year. Transfer students will be examined upon entrance.

Students who fail to pass the Qualifying Examination for Upper Division Credit but wish additional credit may, by special examination, be allowed a maximum of 4 more units at the Lower Division level.

Senior Comprehensive Examination in Applied Music—all students concentrating in Applied Music will present a satisfactory senior public recital or take the comprehensive Applied Music Examination to be given at the end of the senior year.

Printed information concerning the Qualifying Examinations may be obtained from the Music Department.

GROUP ACTIVITIES

As an important force in the educational life of Pomona College, the Music Department offers opportunity for participation in various instrumental and choral activities on an extra-curricular as well as a credit basis. Not more than two of the following credit-courses may be taken simultaneously. Permission of the instructor is required.

57a-57b. COLLEGE CHOIR. *Mr. Russell.* The study of classic and contemporary choral music through rehearsals leading to public performance. All students are eligible for the Choir, but continued membership is contingent upon satisfactory performance in a singing test held in October on music practiced during the opening weeks of the semester. New members admitted in first semester only. Fee to cover cost of music, \$2.00 1 unit. May be repeated for

redit. *MWThF*, 12:30-1:10; *T*, 11:30-12:20. (Women do not meet on *Th*; men do not meet on *M*.)

8a, 58b. ORCHESTRA. *Mr. Fiske*. A study of major works of orchestral repertoire and application of the principles of orchestral routine through public performance. Two periods of attendance weekly. Additional sectional rehearsals at option of director. The course may be repeated for credit. 1 unit. *Th*, 4:15.

9a, 59b. BAND. *Mr. Russell*. Concert and field work, brass ensemble work, joint performance with choral groups, opportunity for performance of student compositions and arrangements. Two rehearsals weekly. 1 unit. May be repeated for credit. *MW*, 4:15.

10a, 60b. MEN'S AND WOMEN'S GLEE CLUBS. *Mr. Russell*. The Glee Clubs offer opportunity for study and performance of sacred and secular choral works in a small extra-curricular ensemble. Each club enrolls between thirty and forty members at the beginning of the college year. All students are eligible, although final admission is by tryout only. Two rehearsals weekly. No credit.

FEES FOR INSTRUCTION AND PRACTICE

<i>For those paying regular tuition:</i>		PER SEMESTER
One-half hour private lesson per week		\$45.00
Each additional half-hour		40.00
<i>For those carrying less than ten hours of college work, exclusive of work in applied music:</i>		
One-half hour private lesson per week		60.00
Each additional half-hour		40.00
Class instruction		25.00

PRACTICE FEES

	PER SEMESTER
Piano, one hour daily	6.00
Ridges Hall Organ (four manuals), one hour weekly	5.00
Two-manual Organ, one hour weekly	2.50
Ridges Auditorium Organ, Claremont College, (advanced students only) one hour weekly	15.00

All students taking courses in Theory (Harmony, Counterpoint, Composition and Orchestration) will be charged the above fee of \$6.00 per semester for use of a piano. Students taking two of these courses will not be charged this fee for the second course, and the fee will not be charged to students who pay a practice fee in connection with their lessons in Applied Music.

AVAILABLE AT SCRIPPS COLLEGE

- 69. NINETEENTH CENTURY MUSIC. *Mr. Pattison*. Year course. *TTh*, 1:15-45.
- 170. CONTEMPORARY MUSIC. *Mr. Pattison*. Year course. *TTh*, 3:15-4:45.

* * *

Graduate work in Theoretical and Applied Music is offered under the auspices of the Claremont Graduate School.

Oriental Affairs

A student concentrating in Oriental Affairs must take Oriental Affairs 51a and 51b. Twenty-four hours of upper division work are required. This must include one year's work in language. The other work should be selected from the following courses: Oriental Affairs 103, 104, 105, 111, 123, 124, 140, 160; Philosophy 126.

51a, 51b. THE CULTURAL LEGACIES OF EAST ASIA. *Mr. Ch'en.* A survey of the humanistic achievements of China and India, and their diffusion in other lands in East Asia. A general introduction to East Asian literature, philosophy, religion, and art. 3 units. *MWF, 10.*

52a, 52b. FIRST YEAR CHINESE. A course for beginners in the Chinese language, with equal emphasis on the analysis of written character and on actual use of the spoken language. 3 units. *MWF, 8.*

103a, 103b. HISTORY OF CHINA. *Mr. Ch'en.* General survey of Chinese History, with emphasis on such topics as the rise of philosophical schools, important movements in literature and art, and the evolution of social and political institutions. An effort will be made to interpret the complexities of the problem of present day China in the light of her ancient cultural heritage. 3 units. *MWF, 9.* (Omitted in 1953-54.)

104. CHINESE LITERATURE IN TRANSLATION. A study of outstanding Chinese literary works in English translation with the aim of deeper appreciation of Oriental life and thought. 3 units. Second semester. *MWF, 9.* (Omitted in 1953-54.)

105. CONTEMPORARY EAST ASIA. *Mr. Ch'en.* The impact of Occidental cultures and peoples upon Eastern Asia, including India and Malaysia; the physical, intellectual, and moral resources of Oriental nations; the post-war problems of these countries today. 3 units. First semester. *T, 7-9:30 p.m.*

111. JAPANESE HISTORY AND CULTURE. The evolution of Japanese social, economic, and political institutions since prehistoric times. Geographic foundations and the development of Japanese philosophy, literature, and the fine arts will receive some stress. About one-third of the course will deal with Japan since 1603. 3 units. Second semester. *TT&S, 10.* (Omitted in 1953-54.)

123. EASTERN ASIA IN THE NINETEENTH CENTURY. A consideration of the traditional patterns of life and institutions in China under the Manchus, in Tokugawa Japan, and to a lesser extent under the old regime in Korea, Siberia, and Southeastern Asia prefaces a study of the impact of Western imperialism and civilization upon those countries. Domestic developments receive slightly more emphasis than foreign relations. 3 units. First semester. *MWF, 11.*

124. EASTERN ASIA IN THE TWENTIETH CENTURY. Cultural and political revolutions which began or have been accentuated since the turn of

the last century and which still are in progress will be studied. Special attention is devoted to the implications of such forces as nationalism and imperialism, democracy and totalitarianism, capitalism and communism, science and industrialism, operating as the Far East evolves new modes of thought, organization and behavior. It is suggested but not required that this course be preceded by Oriental Affairs 123. 3 units. Second semester. *TThS, 10.*

140. HISTORY OF CULTURAL RELATIONS BETWEEN CHINA AND THE OCCIDENT. *Mr. Ch'en.* A rapid survey of the religious, intellectual, literary and artistic relations and interchanges between China and the Western World from Greco-Roman times to the middle of the nineteenth century. 3 units. Second semester. *T, 7-9:30 p.m.*

151a, 151b. SECOND YEAR CHINESE. An intermediate course open to those who have had 52a, 52b. 3 units. *MWF, 2:15.*

160. HISTORY OF FAR EASTERN DIPLOMACY. Some attention to European relations with Malaysia and Indonesia, and to the period of 1500-1800; but major emphasis on diplomatic relations of the Western Powers and Russia with China, Japan, Korea, and the Philippines since 1800. 3 units. First semester. *TThS, 10.*

181a, 181b. THIRD YEAR CHINESE. A continuation of 151a, 151b with exercises in reading classical (Wenli) Chinese prose and poetry. 3 units. Arranged.

195. READINGS IN ORIENTAL AFFAIRS. *Staff.* Prerequisite: one course in Oriental Affairs. 2 or 3 units. Each semester. May be repeated for credit. Arranged.

ORIENTAL PHILOSOPHY. For description see Philosophy 126.

AVAILABLE AT CLAREMONT GRADUATE SCHOOL

22a, 222b. STUDIES IN THE HISTORY OF CHINESE THOUGHT. Arranged.

251a, 251b. ADVANCED CHINESE.

261. PROBLEMS IN CHINESE HISTORY *Mr. Ch'en.* Each semester. Arranged.

268a, 268b. STUDIES IN THE DIPLOMATIC HISTORY OF EASTERN ASIA. Arranged.

Philosophy

Courses 57, and the combination of 110 and 111 are general introductions to philosophy. They are recommended for students who wish a general acquaintance with the subject. Either satisfies the distribution requirement.

Concentration: Students planning to concentrate in philosophy must take twenty-four units of upper division work including philosophy 110, 111, 112 and 113. Eighteen of these units must be in the field of philosophy, but six units of work may be chosen from other departments if the selection is approved by the student's adviser. Philosophy 51 and 131 are strongly recommended for those concentrating in philosophy. Information concerning the Honors pro-

gram in philosophy may be obtained from the Department. Those intending to do graduate work in philosophy should have a reading knowledge of French and German.

51. INTRODUCTION TO LOGIC. *Mr. Iredell*. A study of the elements of deductive and inductive reasoning with special emphasis upon the nature and use of scientific hypotheses, probability, and deductive and inductive fallacies. 3 units. First semester. *MWF*, 8.

57a, 57b. PROBLEMS OF PHILOSOPHY. *Mr. Iredell, Mr. Jones, and Mr. Sontag*. An introductory consideration of the meaning and method of philosophy, an examination of the major problems with which philosophers deal, such as ethics, theory of knowledge, as well as the problems which emerge in the sciences, and a review of some of the main philosophic estimates of life. 3 units. Three sections. *MWF*, 9, 10; *TThS*, 8.

110. CLASSICAL PHILOSOPHY. *Mr. Jones*. The first of a series of four semester courses, normally taken in sequence, designed to present the history of western philosophy through primary source readings, lectures and discussion. The period covered will be from early Greek philosophy to the end of the Middle Ages. 3 units. First semester, *MWF*, 11.

111. MODERN PHILOSOPHY. *Mr. Sontag*. Primary source readings, lectures and discussion on the period including the Renaissance, the Continental Rationalists, the British Empiricists, and Kant. 3 units. Second semester. *MWF*, 11.

112. THE NINETEENTH CENTURY. *Mr. Jones*. A study of the main current of 19th century thought and of their reflection in the literature, the history and the social movements of the period. 3 units. First semester. *MWF*, 2:15 (Omitted in 1953-54.)

113. CONTEMPORARY PHILOSOPHY. *Mr. Iredell*. A study of contemporary philosophic thought with special reference to the dominant ideas of the civilization of today. Prerequisite, Philosophy 57, or such previous work as will provide an equivalent grasp of the basic problems of philosophy. 3 units. Second semester. *MWF*, 8.

118. METAPHYSICS AND ONTOLOGY. *Mr. Sontag*. A speculative inquiry into the fundamental questions of existence, with special attention to such problems as being and non-being, the infinite and the finite, God and the world, substance unity, and the nature of time. The attempt will be to uncover first principles in terms of which an explanation may be given for the ultimate origination of things. The course will consist of readings and discussions in the classical sources of metaphysical doctrine, with the intent of reaching a constructive systematic answer to these fundamental questions. 3 units. Second semester (Offered in alternate years.) *MWF*, 9. (Omitted 1953-54.)

120. PHILOSOPHY OF ART. *Mr. Jones*. Designed primarily for students working in some form of artistic expression who are interested in studying the significance and limitations of the esthetic experience. 3 units. First semester. *MWF*, 2:15.

124. **PHILOSOPHY AND RELIGION.** *Mr. Sontag.* A study of the relationship of philosophy, theology and religion, considering specifically the way in which religion involves philosophical problems and of how philosophy applies to certain religious questions. The chief topics will be an evaluation of the traditional proofs for God's existence and the difficulties involved in trying to describe the Divine Nature, together with an analysis of religion's view of the nature of man and the nature of the world, as well as the particularly unique claims of Christianity. The course will proceed by reading and discussion of the classical statements from Plato to the present day. 3 units. *MWF*, 9. (Offered in alternate years. Omitted in 1953-54.)

126. **ORIENTAL PHILOSOPHY.** *Mr. Iredell.* This course is designed to provide the student with a general background of oriental thought as a basis for further study of oriental life and culture. An attempt will be made to gain an appreciation of the thought life of the Orient through a study of some of the more important thinkers and schools of oriental philosophy and through a comparison of oriental and western philosophical views and cultural ideals. 3 units. Second semester. *MWF*, 8. (Omitted 1953-54.)

131. **ETHICS.** *Mr. Sontag.* A consideration of the central issues in moral theory, such as right and wrong, good and evil, justice and injustice, together with the historical and contemporary solutions which have been proposed for these problems. The course will discuss and evaluate the ethical theory of various philosophers from ancient times down to the contemporary scene. The aim will be to discover which ethical views seem to be the most adequate, with a view to formulating an acceptable ethics for the present day. 3 units. Second semester. *MWF*, 10.

132. **PHILOSOPHY OF THE STATE.** *Mr. Jones.* A critical investigation of such central political concepts as: the state, society, the individual, freedom, law, rights, duty, property, etc. The course will emphasize applications to currently competing systems; it is therefore designed for the student who is keenly aware of the clashes in ideals around him and who is willing to push systematically to the roots of these clashes. 3 units. Second semester. *TThS*, 9. (Omitted in 1953-54.)

136. **THE PHILOSOPHY OF PLATO.** *Mr. Sontag.* A systematic study of the Dialogues of Plato, with particular emphasis on uncovering the complete Platonic metaphysics, theory of knowledge, and ethics. The aim will be to discover and to understand the unified thought of a single man, as an example of the growth and development of philosophic thought with a view to testing its adequacy as a tenable philosophy for the present day. The course will proceed by a careful study of all of the Platonic corpus, with particular emphasis on the later and more important Dialogues. 3 units. First semester. *MWF*, 10.

142. **SEMINAR IN THE PROBLEMS OF PHILOSOPHY.** *Staff.* Designed primarily for departmental majors. Problems in metaphysics, ethics and epistemology will be considered, with the exact program varying from year to year depending on the needs and interests of those participating. The course will consist of

primary source readings, discussion and reports, and it may be repeated for a total of six units. 3 units. Each semester. *W*, 3:15 and arranged.

151. SOME REPRESENTATIVE PHILOSOPHIES OF LIFE. *Mr. Jones*. A study of the views of four philosophical poets — Lucretius, Dante, Goethe, and T. S. Eliot. 3 units. Second semester. *MWF*, 2:15

190. SENIOR RESEARCH PROJECT. *Staff*. Independent study and reading on a topic of the student's choice, culminating in a major research paper. The problem selected may be either speculative or historical, and an outline of the proposed project should be submitted for approval at the beginning of the term. 3 units. Each semester. Arranged.

HISTORY OF POLITICAL THOUGHT. For description see Government 182.

PHILOSOPHY OF RELIGION. For description see Religion 101.

INTRODUCTION TO THE PHILOSOPHY OF EDUCATION. For description see Education 151.

AVAILABLE AT SCRIPPS COLLEGE

IV-54. LITERARY INTERPRETATIONS OF PHILOSOPHICAL QUESTIONS. *Mr. Barrett*. First semester. *MWF*, 11.

IV-158. STANDARDS AND VALUES.
First semester. *MWF*, 10.

Mr. Barrett

IV-160. CONTEMPORARY PHILOSOPHY. *Mr. Barrett*. Second semester. *MWF*, 10.

Physical Education

The program of Physical Education in Pomona College is based upon the belief that a liberal education should include knowledge of the structure and functions of the human mechanism; understanding of the hygienic practices which promote physical, mental and social health; reasonable skill in developmental and recreational activities of a physical type which will promote the individual's well-being during college years, and in later life; and a disposition to make such knowledge and skill essential elements in effective living.

A student is required to take one unit of Physical Education Activities per semester during his Freshman and Sophomore years, and one-half unit per semester during his Junior and Senior years.

CONCENTRATION IN PHYSICAL EDUCATION

This program, followed by a year of graduate work, will qualify the student for the general credential with a major in physical education. It will also qualify the student for further study in physical therapy, occupational therapy, and recreation. Students interested in the three latter fields should confer with some member of the physical education department during the

freshman year since slight changes in the following program may be needed to qualify for entrance to some of these fields.

In order to complete all required courses in the four year college period students should take courses in the year in which they are suggested below.

FRESHMAN YEAR: Biology 1, English 1, Physical Education 5. Suggested: Speech and Drama 52.

SOPHOMORE YEAR: Zoology 37, Education 53, Psychology 51, Sociology 51 and 52.

JUNIOR YEAR: Physical Education 123, 124, 129, 118 or 119 (women), Psychology 107. Suggested: Music 53, Physical Education 224.

SENIOR YEAR: Physical Education 126, 152, 154, 191 (men), 130 (women), Psychology 108.

In addition to the above, 6 units of physical education activities are required. It is suggested that these be so selected as to give the individual opportunity for both technical skills and leadership training in a wide range of activities. A reading knowledge of French or German is highly desirable for students planning graduate research in physical education.

A non-credit Camp Counselor's training course for women is held throughout the year. The course aims to provide its members with experience and skills useful in summer camps, playgrounds, and other activities of community recreation. (Given when there is sufficient demand.)

THEORY

1. PRINCIPLES OF HEALTHFUL LIVING. A consideration of factors that influence the physical and mental health of people as individuals and as members of society. Includes methods for the promotion of the health of the individual with emphasis on special health problems of college students and young people generally. Women, 3 units, first semester, *Miss Shurtz*, MWF, 10. Men, 2 units, first semester, *Mr. Malan*, MW, 11.

18a-118b. (Women) METHODS OF TEACHING INDIVIDUAL AND DUAL SPORTS. *Miss Shurtz*. Analysis of techniques and methods of presenting individual and dual sports at the elementary and secondary school levels, in camp and playground situations. Laboratory work includes supervised teaching of the individual and dual sports in college classes, officiating, and assisting in planning intramural tournaments and playdays. Prerequisite—minimum skill in the following physical education activities: archery, badminton, swimming, tennis. 2 units. MW, 9 and arranged. Given in alternate years. To be given in 1953-54.

19a-119b. (Women) METHODS OF TEACHING TEAM SPORTS. *Miss Shurtz*. Analysis of techniques and methods of presenting team sports at the elementary and secondary school levels, in camp and playground situations. Laboratory work includes supervised teaching of the team sports in college classes, officiating, and assisting in planning intramural tournaments and playdays. Prerequisite—minimum skill in the following physical education activities: basketball, hockey, softball, speedball, volleyball. 2 units. TTh, 9. Given in alternate years. To be given in 1953-54.

123. NATURE AND FUNCTION OF PLAY. *Miss Cawthorne*. The psychology of play and the function of play in growth, development and social adjustment. Methods of leadership and organization of play activities to bring out moral habits and use of the democratic process in play situations. Special attention is given to the elementary school physical education program. First semester. 2 units. *TTh*, 8.

124. COMMUNITY RECREATION. *Miss Cawthorne*. A study of the organization of school and municipal playgrounds and the contributions of the federal government to recreation programs in the United States. History of the Recreation Movement in the United States. Types of organization and leadership needed for conducting tournaments, active and quiet play programs, social recreation and camp activities. Study of the physical lay-out of different types of recreation centers. Survey of administrative set-ups for municipally financed recreation programs. Limited to Juniors and Seniors. Second semester. 2 units. *TTh*, 8.

126. COMMUNITY HYGIENE. *Miss Shurtz*. A survey of the field of public health and sanitation. Includes a brief historical account, a study of general factors influencing public health and a summary of public health agencies, their organization and activities. Extensive study of public and private water supplies, disposal of wastes, control of food and dairy products, proprietary medicine and quackery, and mental, industrial and school hygiene. Attention given to methods of setting up a school health program. Second semester. 3 units. *MWF*, 10.

129. KINESIOLOGY. *Miss Cawthorne*. An analysis of joint and muscular mechanisms, and their relation to problems of bodily development and efficiency. Prerequisite, Zoology 37. 3 units. First semester. *MWF*, 8.

130a, 130b. THE HISTORY AND TEACHING OF DANCE. *Miss Burt*. Analysis of the problems and techniques of presentation of rhythms for those preparing for recreational leadership or for teaching at the elementary or high school level. The first semester includes the historical background of both folk and contemporary dance and the theory and practice of teaching elementary rhythms and folk dance. The second semester includes advanced technique and composition and the theory and practice of teaching contemporary dance at the secondary level. One hour lecture, two hours laboratory, each semester. 2 units. Lecture *M*, 10; laboratory *WF*, 10. Permission of the instructor is required.

152. PHYSICAL DEVIATIONS. *Miss Cawthorne*. Study of body mechanics and the causes, prevention, and correction of physical defects. Laboratory work includes methods of examination, prescription of exercises. Prerequisite, 129. 3 units. Second semester. *MW*, 8; and laboratory *F*, 8-10.

154. PRINCIPLES OF PHYSICAL EDUCATION. *Mr. Malan*. Limited to Juniors and Seniors preparing to teach Physical Education. 3 units. Second semester. *MWF*, 11. (Omitted in 1954-55.)

191a, 191b. (Men) THEORY AND PRACTICE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. *Staff*. Limited to senior majors in Physical Education and

Education. Others must have permission of department. 4 units. *WF, 1:15* and arranged. Practice teaching, three hours, arranged.

224. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION AND RECREATION. (*Available at the Claremont Graduate School during Summer Session when there is sufficient demand.*) Mr. Bell. 3 units.

MEN'S ACTIVITIES

Students engage in programs of physical education activities selected according to individual needs as determined by medical and physical examinations and tests. Complete freedom in the choice of activities is permitted only to men who maintain acceptable standards in health, physical development, and physical efficiency. Among the minimum requirements of the Department are good posture, ability to swim, elementary skill in self defense, proficiency in fundamental activities, reasonable skill in at least one individual sport and in one team game.

The following physical education activities are carried on under supervision of the Department: Archery, badminton, baseball, basketball, boxing, corrective exercises, cross country running, dancing, fencing, football, golf, gymnastics, life saving, softball, swimming and diving, tennis, touch football, track and field athletics, tumbling, volleyball, water polo, weight lifting, and wrestling. Fees as indicated are required each semester of those who select archery (\$1.50), fencing (\$7.00), golf (\$10.00).

The Department conducts a competitive intramural program including sports in season.

The college program of intercollegiate athletics is an integral part of the program of Physical Education. No student is permitted to participate in the more strenuous forms of competition without a certificate from the College Physician indicating that the individual is physically fit for such participation.

The student obtains credit in the required courses listed below by participating in activities selected in accordance with the principles set forth in the preceding paragraphs.

1a-1b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Freshman year $\frac{1}{2}$ unit. Arranged.

2a-2b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required of Freshmen not taking Military Science. $\frac{1}{2}$ unit. Arranged.

53a-53b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Sophomore year. $\frac{1}{2}$ unit. Arranged.

54a-54b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required of Sophomores not taking Military Science. $\frac{1}{2}$ unit. Arranged.

105a-105b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Junior year. $\frac{1}{2}$ unit. Arranged.

107a-107b. PHYSICAL EDUCATION ACTIVITIES. *The Staff.* Required, Senior year. $\frac{1}{2}$ unit. Arranged.

WOMEN'S ACTIVITIES

Medical and physical examination is given all entering students with subsequent posture tests. Physical activities are allowed or prescribed as the result of these examinations. Participation in a Fundamental Activity is required one semester of the Freshman year. Students may have freedom of election in other activities in so far as medical and physical examinations warrant, but must include by the end of the Sophomore year one individual sport and one semester of some form of dancing. The passing of a swimming achievement test is required for graduation. It should be completed by the end of the Sophomore year.

Activity fees are charged for badminton, and archery (\$1.50 semester), golf (\$10 semester), fencing (\$7 semester), riflery (\$2.00 semester), social dancing (\$10 semester).

Six units of Physical Education Activities are required for graduation. One-half unit is credited for Fundamentals, which includes courses organized to teach the basic fundamentals of physical activity. The remaining 5½ units may be earned by participation in other activities.

FUNDAMENTALS: contemporary dance, individual gymnastics, group gymnastics.

TEAM SPORTS: basketball, softball, speedball, hockey, volleyball.

INDIVIDUAL SPORTS: archery, badminton, tennis, golf, riflery, swimming, fencing.

DANCING: contemporary, folk and square, social, ballet.

11a-11b. FUNDAMENTALS AND OTHER ACTIVITIES. *The Staff*. Required, Freshman year. ½ unit. Arranged.

12a-12b. SPORTS OR DANCING. *The Staff*. Required, Freshman year. ½ unit. Arranged.

63a-63b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. ½ unit. Arranged.

64a-64b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Sophomore year. ½ unit. Arranged.

115a-115b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Junior year. ½ unit. Arranged.

117a-117b. PHYSICAL EDUCATION ACTIVITIES. *The Staff*. Required, Senior year. ½ unit. Arranged.

Physics

The minimum concentration program in physics includes 25 units of upper division physics, Mathematics 1, 65, 151, and Chemistry 1. Additional work in physics, mathematics, chemistry, German, engineering drawing, and descriptive geometry is recommended. A minimum concentration program in physics will normally be elected by those who plan to use physics in combination with training in some other field, and who do not plan to do graduate work in physics.

A student who plans to do graduate work in physics will be expected to take 31 units of upper division physics, Mathematics 1, 65, 151, and not less than six units selected from Mathematics 119, 152, 185, and 210. The student also will be expected to establish a good foundation in chemistry and to acquire a reading knowledge of German. Courses in descriptive geometry and engineering drawing are recommended.

All students concentrating in physics will consult with the physics staff about their concentration examination during the first week of their senior year.

9a, 1b. INTRODUCTION TO PHYSICAL SCIENCE. *Mr. Fryer*. A non-mathematical course intended for those who wish to obtain a knowledge of the fundamental acts, theories and applications of physics. The lectures will be illustrated by numerous experimental demonstrations and the subject will be developed from the basis of the discrete structure of electricity and matter. Fee \$5.00 each semester. 3 units. *MWF, 10*.

9a, 51b. GENERAL PHYSICS. *Mr. Miller*. A study of the phenomena and laws of mechanics, heat, wave motion, sound, electricity, magnetism, and light. This course is designed to furnish a working knowledge of the basic principles of physics and is planned especially for those students who expect to continue studies in physics, chemistry, engineering or medicine. Prerequisite, Mathematics 1a-1b preceding or accompanying the course. 4 units. Laboratory fee \$3.00. *TThS, 8*. Laboratory *MTW or Th, 1:15-4:05*.

10. HEAT AND THERMODYNAMICS. *Mr. Henke*. A course dealing with the principles of thermodynamics and the theory of heat. The first and second laws of thermodynamics and their application to liquids, vapors, and gases will be emphasized. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF, 11*.

13a, 113b. MECHANICS. *Mr. Henke*. Kinematics, dynamics, and statics of particles and rigid bodies with applications to problems of physics and engineering. Prerequisite, Physics 51, Mathematics 65. 3 units. *TThS, 9*.

141a, 141b. ELECTRICITY AND MAGNETISM. *Mr. Fryer*. A course in the theory of electricity and electromagnetism. Emphasis will be placed on the fundamental laws of electrostatics and electrodynamics, electrical circuit theory, and introductory electromagnetic field theory. Prerequisite, Physics 51, Mathematics 151 preceding or accompanying the course. 3 units. *TThS, 8*.

142a, 142b. ELECTRICAL MEASUREMENTS. *Mr. Fryer.* Laboratory in electrical and electromagnetic measurements. The first semester is concerned with direct current measurements and the use of standard bridge circuits. The second semester emphasizes alternating-current circuits and the modern vacuum tube devices commonly employed in physical and engineering laboratories. 1 unit. Laboratory fee \$4.00. *T, 1:15-4:05.*

153. OPTICS. *Mr. Henke.* The fundamentals of geometrical optics. Theory and applications of physical optics with emphasis upon the phenomena of interference, diffraction and polarization of light. Prerequisite, Physics 51, Mathematics 65. 3 units. First semester. *MWF, 9.*

154. OPTICAL MEASUREMENTS. *Mr. Henke.* Experimental study of phenomena of geometrical and physical optics. Laboratory to accompany Physics 153. 1 unit. First semester. Laboratory fee \$4.00. *Th, 1:15-4:05.*

155. ATOMIC STRUCTURE. *Mr. Henke.* An introduction to modern theories of atomic and nuclear structure, elementary particles, and radiations. Prerequisite, Physics 51, Mathematics 65. 3 units. Second semester. *MWF, 9.*

156. ADVANCED PHYSICS LABORATORY. *Mr. Fryer.* Independent experimental study of selected subjects in modern physics. Prerequisite, approval of the instructor. 1 unit. Second semester. Laboratory fee \$4.00. *Th, 1:15-4:05.*

191a, 191b. MATHEMATICAL PHYSICS. *Mr. Miller.* Application of mathematics to selected subjects in classical and quantum physics. Prerequisite approval of the instructor. 3 units. *TThS, 10.*

Psychology

Students concentrating in psychology are required to take psychology 51, and 24 units of upper division courses including psychology 109 and 194. As a part of the latter requirement, 6 units may be offered from the following courses:

Biology 112, Zoology 137, Mathematics 194, Sociology 152. Students should note that some of these courses are not offered every year. Training in zoology, physics, chemistry, French and German is recommended for students planning to do graduate work in psychology. Psychology 51b is prerequisite to all further work in the department with the exception of Psychology 102. Child Psychology may be taken concurrently with 51b.

51a, 51b. INTRODUCTION TO PSYCHOLOGY. *Staff.* Fundamental facts and principles of consciousness and behavior. The relation of the nervous system to mental processes and action. Practical applications in various fields. 3 units. Three sections, *MWF, 11, and TThS, 9, 10.*

102. PSYCHOLOGICAL STATISTICS. *Mr. Faust.* Correlation methods, probability, chi square, tests of significance. Prerequisite: Psychology 51 or permission of instructor. 3 units. First semester. *WF, 1:15-3:05.*

03. INDIVIDUAL DIFFERENCES. *Mr. Ellis.* A study of the nature and extent of individual differences and their causes as determined by objective methods. Age, sex, and race differences. Genius, subnormality, insanity and criminality. The organization of mind. Applications in various fields are considered briefly. 3 units. First semester. *MWF, 9.*
07. EDUCATIONAL PSYCHOLOGY. *Mr. Ellis.* Practical applications of psychology to education. The nature of the learner; intelligence and motivation; principal features of the learning process. 3 units. First semester, *TThS, 9;* second semester. *MWF, 9.*
08. CHILD PSYCHOLOGY. *Mr. Faust.* A survey of development and behavior of the young child. Prerequisite: Psychology 51a or 52. 3 units. First semester. *TThS, 10.* Second semester. *MWF, 11.*
09. INTRODUCTION TO PSYCHOLOGICAL METHODS. *Mr. Greenspoon.* Discussion and demonstration of methods of studying psychological problems and evaluating data. Laboratory experiments. Laboratory fee \$1.50. Prerequisite: Psychology 51 or permission of instructor. 3 units. First semester. Lecture *S, 8,* laboratory, *TTh, 8-9:50.*
17. PHYSIOLOGICAL PSYCHOLOGY. *Mr. Faust.* Physiological and neural aspects of psychological functions. Permission of instructor required. 3 units. First semester. *MWF, 8.*
31. ABNORMAL PSYCHOLOGY. *Mr. Greenspoon.* Problems of maladjustment; factors contributing to mental disorders; methods of diagnosis and therapy. Prerequisite: Psychology 51. 3 units. First semester. *MWF, 10.*
37. ASSESSMENT OF PERSONALITY. *Mr. Greenspoon.* Concepts regarding the nature and organization of personality; techniques for testing or evaluating personality characteristics. Prerequisites: Psychology 108, 131. 3 units. Second semester. *MWF, 10.*
54. SOCIAL PSYCHOLOGY. *Mr. Greenspoon.* Cultural determinants of behavior; dynamics of interpersonal relations and group action; methods of studying social behavior. 3 units. Second semester. *TThS, 9.*
56. MENTAL TESTS. *Mr. Greenspoon.* Survey of principles and methods of measuring intelligence. 3 units. First semester *MWF, 11.*
58. MENTAL TESTS PRACTICUM. *Mr. Faust.* Supervised experience in administering individual mental tests. Prerequisites: Psychology 102, 137, 156, and permission of instructor. 3 units. Second semester. *M, 2:15-4:05* and arranged.
68. ADVANCED CHILD PSYCHOLOGY. *Mr. Faust.* The study of later childhood and adolescence. Prerequisites: Psychology 108. 3 units. Second semester. *TThS, 8.*
70. THEORIES OF LEARNING. *Mr. Greenspoon.* Consideration of the leading theories concerning the nature of learning and its significance for general

psychology. Prerequisite: 12 units of psychology. 3 units. First semester. *TThS*, 10.

172. SYSTEMS OF PSYCHOLOGY. *Mr. Faust*. A discussion of contemporary systems of psychology with special emphasis placed upon Behaviorism, Gestalt Psychology, and Psychoanalysis. Prerequisite, Psychology 51. 3 units. Second semester. *TThS*, 10.

188. EXPERIMENTAL PSYCHOLOGY. *Mr. Greenspoon*. Analysis of the design and methodology of recent psychological experiments. Students will perform illustrative experiments. Laboratory fee \$1.50. 3 units. Second semester. *WF*, 8-9:50.

192. READING AND RESEARCH. *Staff*. Individual work on special topics. 1-2 units. Either semester. May be repeated for credit. Prerequisite: permission of instructor. Arranged.

194. SENIOR READING COURSE. *Mr. Ellis*. A course designed to supplement and integrate the different courses offered to meet the concentration requirement in psychology and to prepare students for the comprehensive examination. Required of seniors who are concentrating in psychology. 2-4 units. Either semester. *T*, 3:15 and arranged.

AVAILABLE AT SCRIPPS COLLEGE

IV-110. GROWTH AND DEVELOPMENT OF THE CHILD. *Mrs. Jones*. Prerequisite, Elementary Psychology. Year course. *MWF*, 11.

IV-112. CHILD STUDY IN THE NURSERY SCHOOL. *Mrs. Jones*. Prerequisite, Elementary Psychology and IV-110. Year course. *MW*, 2:15 and arranged hours in the Nursery School. Registration by permission of the instructor.

IV-114. NURSERY SCHOOL PROCEDURE. *Mrs. Jones*. Prerequisite, IV-112. Year course. *MW*, 3:15-4:05 and arranged hours in the Nursery School. Registration by permission of the instructor.

V-119. HUMAN PSYCHOBIOLOGY. *Mr. Caster*. Registration by permission of instructor. Year course. *TThS*, 8.

Religion

Students planning to concentrate in religion must take the following lower division courses or their equivalents: Religion 1, 2, and 65; History 1, and Philosophy 57. Twenty-four hours of upper-division work, of which eighteen must be in the field of religion, are required. Six units of upper-division courses may be taken in the related fields of English, government, history, philosophy, psychology, and sociology.

Students transferring to Pomona at the beginning of the Junior year may concentrate in religion if lower division requirements have been met prior to entrance or can be met during the Junior year.

1. THE RELIGION OF THE OLD TESTAMENT. *Staff*. A course designed as a general introduction to Old Testament religious ideas. The developing beliefs and practices of Hebrew religion will be considered in their historical sequence, beginning with the patriarchal period and ending with Judaism of the second century before Christ. 3 units. First semester. Four sections. *MWF, 8, 9; TThS, 8, 9.*
2. THE RELIGION OF THE NEW TESTAMENT. *Staff*. A course designed as a general introduction to New Testament religious ideas. Attention will first be given to the teaching of Jesus, followed by a study of the message of Paul and a consideration of the developing religious views of the early Christian community. 3 units. Second semester. Four sections. *MWF, 8, 9; TThS, 8, 9.*
- 55a, 65b. GREAT PERSONALITIES IN CHRISTIAN HISTORY. *Mr. von Rohr*. A survey of the development of Christian beliefs as reflected in the thought of some of the outstanding representatives of the Christian tradition. Among persons studied during the first semester will be Paul, Augustine, Francis of Assisi, and Thomas Aquinas, and during the second semester Erasmus, Luther, Calvin, George Fox, and John Wesley. 3 units. *MWF, 8.*
101. PHILOSOPHY OF RELIGION. *Mr. Kaufman*. A course intended to provide understanding of the meaning, nature and function of religion. Analysis of the human situation and its religious problems (anxiety, despair, love, hate, personal dependence, etc.) will be followed by study of several answers to these problems, such as existentialism, rationalism, natural religion, and Christian faith. 3 units. First semester. *TThS, 10.*
102. CONTEMPORARY RELIGIOUS THOUGHT. *Mr. Kaufman*. Reading and discussion of writings reflecting varying ways to understand the meaning of the Christian message for the modern world. Representatives of contemporary religious thinking in both Europe and America will be studied. 3 units. Second semester. *TThS, 10.* (Omitted in 1953-54.)
107. THE LIFE AND TEACHINGS OF JESUS. *Mr. Rankin*. A study of the content of the New Testament records concerning Jesus. Attention will first be given to the facts and theories related to his life, followed by a consideration of the content and purpose of his teaching and its relevance for the modern day. Opportunity will be provided for class reports and discussion. 3 units. First semester. *MWF, 11.*
108. THE LIFE AND MESSAGE OF PAUL. *Mr. Rankin*. An investigation of Paul's role in the growth of the early Christian Church. Attention will be given both to the major events of his career and to the emergence of his message out of the conflicts of first century religious thought. Opportunity will be provided for class reports and discussion. 3 units. Second semester. *MWF, 11.*
141. CHRISTIAN ETHICS. *Mr. Kaufman*. An analysis of ethical problems from a Christian perspective. Particular attention will be paid to the relation of Christian ethics to Christian thought and to everyday personal and social experiences. Some reference will be made to outstanding thinkers in the Christian tradition and the relation of Christian ethics to philosophical ethics. 3 units. First semester. *TThS, 9.* (Omitted in 1953-54.)

142. CHRISTIANITY AND MODERN CULTURE. *Mr. Kaufman.* A study of the analyses of contemporary society and culture by sociologists, economists, psychologists, artists, and philosophers, in the light of a Christian perspective on society and culture and the role of religion in culture. Consideration will be given to the roles of both the individual Christian and the Church. 3 units. Second semester. *TThS*, 9.

159. RELIGION IN EARLY AMERICAN CULTURE. *Mr. von Rohr.* A study of the role of religion in the development of the American nation, from the beginning of the colonial period to the time of the Civil War; the origins and growth of American religious thought; the place of religion in the larger totality of early American culture; its relation to the emergence of some of the major characteristics of our national life. 3 units. First semester. *MWF*, 9.

160. CATHOLICISM AND PROTESTANTISM. *Mr. von Rohr.* A study of the significant similarities and differences in the two major strains of the Christian tradition. Attention will first be given to an understanding of Roman Catholic beliefs and practices, followed by a study of Protestantism in both its original and modern forms. 3 units. Second semester. *MWF*, 9.

191a, 191b. ADVANCED READINGS IN RELIGION. *Staff.* An independent reading program for students concentrating in the field of religion. 3 units. Arranged

AVAILABLE AT SCRIPPS COLLEGE

IV-140a, 140b. LIVING RELIGIONS OF THE WORLD. *Mr. Hogue.* Open to sophomores by permission. *TTh*, 8 and arranged.

IV-141a, 141b. CHRISTIANITY IN AMERICA SINCE 1865. *Mr. Hogue.* Admission by permission of instructor. Arranged.

Romance Languages and Literatures

Concentration in the Romance Languages is designed for students who are planning to teach one or more of the group, or to enter some form of foreign service, or for those who wish to develop an appreciation of the cultures involved. Preparatory work in Latin is recommended and will be found very helpful. Attention is called to the fact that the intermediate courses in French and Spanish meet Lower Division Requirement 6.

A student planning to concentrate in a single Romance Language is required to take at least 24 units in courses numbered over 100 in the language selected. Work in this language should, if possible, have been started before entering college.

For a concentration in a combination of the Romance Languages, 36 hours of upper division work are required.

Students who expect to teach one of the Romance Languages are urged to take work in at least one other language of the group.

Related subjects recommended for students concentrating in the department: English Literature, Comparative Literature, History, Philosophy, History of Art, Music Appreciation.

FRENCH

Courses for concentration: Any courses numbered over 100. Of the courses in the literature, French 120 should be taken first.

1-1b. **ELEMENTARY.** *Mr. Crowell, Mr. Leggewie.* Essentials of grammar; dictation and speaking. A cultural approach with the emphasis on the acquisition of reading ability. Extensive outside readings in addition to the work in class. This course is the normal preparation for French 51; however superior achievement may admit to French 81. 3 units. 2 sections. *MWF, 10; TThS, 10.*

2a-51b. **INTERMEDIATE.** *Miss Lindstaedt.* A course designed for those students who have completed two years of high school French, or six units of college French. Grammar review and conversational practice; intensive class reading of selected modern short stories, plays and novels of literary value; extensive outside readings in various literary types selected according to the needs and special interests of the individual student; written reports. Through readings and class discussions the student in this course will become acquainted with modern French writers in a variety of literary types. Normally followed by French 81, but superior achievement in this course may admit to upper division work. 3 units. Two sections. *MWF, 10; TThS, 10.*

6a, 61b. **INTERMEDIATE CONVERSATION.** *Miss Lindstaedt.* A course in spoken French stressing fluency and accuracy through the use of dialogues, reports and recording machines. Outside preparation will be kept to a minimum. Students in this course should also enroll in French 51 or a higher course, or must have the consent of the instructor. 2 units. *MWF, 9.*

7a-81b. **ADVANCED INTERMEDIATE.** *Mr. Leggewie.* A course designed for students who have completed French 1 and 51, or for freshmen who have had three or more years of high school French. Conducted in French as far as possible. Rapid grammar review; extensive class and outside readings at a higher level than in French 51; written reports in French. Through class and outside readings the student in this course should make the acquaintance of a considerable number of modern writers in a variety of literary types. 3 units. *MWF, 11.*

10a-120b. **SURVEY OF FRENCH LITERATURE AND CIVILIZATION.** *Miss Lindstaedt.* Outline of the development of French literature and culture. Readings of selections to give the student a comprehensive view of the history of the literature and life of the French. 3 units. *MWF, 11.*

124a, 124b. **THE NOVEL OF THE NINETEENTH CENTURY.** *Mr. Leggewie.* Intensive study of the novel and its evolution as a reflection of the intellectual, historical and literary movements of the century. Representative writers studied in the first semester, Mme. de Stael, Chateaubriand, Sand, Stendahl and Balzac; in the second semester, Flaubert, the Goncourt brothers, Zola and Maurget. 3 units. Alternates with French 153. *TThS, 9.* (Omitted in 1953-54.)

127a, 127b. MODERN FRENCH THEATER. *Staff*. Study of the French theater from early nineteenth century to present times. Intensive class study of representative works of such playwrights as Hugo, Dumas, Scribe, Brieux, Claudel, Giraudoux. Extensive outside readings with written reports in French. Alternates with French 130, 150. 3 units. (Omitted in 1953-54.)

130. THE CONTEMPORARY NOVEL. *Mr. Leggewie*. A study of such outstanding writers as Gide, Martin du Gard, Mauriac, Proust, Collette, Maurois, Romans. Outside readings with written and oral reports in French. Alternates with French 127a. 3 units. First semester. *TTh*, 2:15-3:30.

141. ADVANCED CONVERSATION AND COMPOSITION. *Mr. Leggewie*. A course conducted entirely in French. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of a correct pronunciation and intonation. Open to students who have completed French 81 or equivalent. 3 units. First semester. *MWF*, 9.

150. FRENCH POETRY FROM PIERRE DE RONSARD TO PAUL VALÉRY. *Mr. Leggewie*. Class study of the masterpieces of French poetry from the sixteenth century to our times. Study of the technique of French versification and the evolution of French poetical thought. Alternates with French 127b. 3 units. Second semester. *TTh*, 2:15-3:30.

153a, 153b. LITERATURE OF THE SEVENTEENTH CENTURY. *Miss Lindstaedt*. Intensive study of the great masters of the French classical age: Corneille, Molière, Racine. Lesser study of Descartes, Pascal, La Rochefoucauld, La Fontaine and others. Historical background; lectures; reading assignments; written reports in French. Alternates with French 124. 3 units *TThS*, 9.

155. LITERATURE OF THE RENAISSANCE. *Mr. Leggewie*. A study of the major authors, works and movements of the French Renaissance with special emphasis on Rabelais and Montaigne. Conducted in French. Written and oral reports in French. Alternates with French 156. 3 units. Second semester. (Omitted in 1953-54.)

156. LITERATURE OF THE EIGHTEENTH CENTURY. *Mr. Leggewie*. A study of the Age of Enlightenment with particular emphasis on Montesquieu, Diderot, Voltaire and Rousseau. Conducted in French. Alternates with French 155. 3 units. Second semester. *MWF*, 9.

ITALIAN

61a-61b. ELEMENTARY. *Mr. Crowell*. A rapid survey of the grammar with special emphasis on the pronunciation. Extensive reading of modern prose. A thorough grounding in French, Spanish or Latin is strongly recommended. 3 units. *MWF*, 11.

SPANISH

Courses for concentration: Any courses numbered over 100. Of the courses on the literature, Spanish 113, 114 should be taken first. For concentration in the field of Latin American Civilization, see page 80; the concentration on International Relations, page 79.

11A-11B. ELEMENTARY. *Mr. Maggipinto*. Essentials of grammar; pronunciation; writing and speaking; class readings of easy modern texts; extensive outside readings adapted to the needs and interests of the individual student. This course is the normal preparation for Spanish 71. 3 units. *MWF, 10*.

71A-71B. INTERMEDIATE. *Mr. Crowell*. A course designed for those students who have completed two years of high school Spanish, or six units of college Spanish. Grammar review and drill in conversation; intensive class reading of selected modern short stories, plays and novels of literary value; extensive outside readings in various literary types selected according to the needs and special interests of the individual student; written reports. Through these extensive readings it is hoped to give the student an acquaintance with modern Spanish writers in a variety of literary types. Normally followed by Spanish 91, but superior achievement in this course may admit to upper division work. 3 units. *MWF, 10*.

81A, 81B. INTERMEDIATE CONVERSATION. *Mr. Maggipinto*. A course in spoken Spanish stressing fluency and accuracy through the use of dialogues, reports and recording machines. Outside preparation kept to a minimum. Students in this course should also enroll in Spanish 71 or a higher course, or must have the consent of the instructor. 2 units. *MWF, 11*.

91A-91B. ADVANCED INTERMEDIATE. *Mr. Maggipinto*. A course designed for students who have completed Spanish 11 and Spanish 71, or for freshmen who have had three or more years of high school Spanish. Conducted in Spanish as far as possible. Rapid grammar review; extensive class and outside readings at a higher level than in Spanish 71; written reports in Spanish. Through class and outside readings the student in this course should make the acquaintance of a considerable number of modern authors in a variety of literary types. 3 units. *TThS, 10*.

113. MODERN SPANISH THEATRE. *Staff*. Study of the works of the leading Spanish playwrights from 1800 to the present time. Reading of certain plays in class; reports on individual outside readings. Conducted in Spanish. 3 units. Second semester. *MWF, 8*.

114. MODERN SPANISH NOVEL. *Staff*. Study of the principal Spanish prose works from 1800 to the present time with emphasis on the novel. Extensive outside readings; written reports. Conducted in Spanish. 3 units. First semester. *MWF, 8*.

151. ADVANCED CONVERSATION AND COMPOSITION. *Mr. Crowell*. A course conducted entirely in Spanish. Development of fluent and accurate use of the spoken and written language. Special stress on the acquisition of a correct pronunciation and intonation. Comprehension of the spoken language developed in part through participation in the class activities of native speakers. Open to students who have completed Spanish 91 or equivalent. 3 units. First semester. *TThS, 8*.

170. CERVANTES; HIS LIFE, TIMES AND WORKS. *Mr. Crowell*. Class study of the *Quijote* and selected *Novelas ejemplares*. Extensive outside readings with reports in Spanish. Alternates with 172. 3 units. Second semester. *TThS, 8*.

172. THEATER OF THE GOLDEN AGE. *Mr. Crowell*. Class study of typical dramas of Lope de Vega, Ruiz de Alarcón, Tirso de Molina, Calderón de la Barca. Further study of these and some of the lesser dramatists outside of class with written reports in Spanish. Alternates with 170. 3 units. Second semester. (Omitted in 1953-54.)

173. MEXICAN LITERATURE. *Mr. Maggipinto*. A study of the literature of Mexico with special emphasis on modern prose. Main writers: Sor Juana, Lizardi, Gamboa, Nájera, Nervo, Azuela, Guzman, Vasconcelos, López y Fuentes, Reyes. Lectures, readings and reports in Spanish. 3 units. First semester. *WF*, 2:15-3:30.

174. THE SPANISH AMERICAN NOVEL. *Mr. Maggipinto*. A study of the novelistic production of Spanish America, excluding Mexico. Main writers: Sarmiento, Blanco Fombona, Reyes, Rivera, Icaza, Barrios, Gálvez, Güiraldes, Rómulo Gallegos, Lynch. Lectures, readings and reports in Spanish. 3 units. Second semester. *WF*, 2:15-3:30.

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I-155. SURVEY OF SPANISH LITERATURE. *Mrs. Lamb*. Year course. *MWF*, 11.
I-175a, 175b. SURVEY OF SPANISH AMERICAN LITERATURE. *Mrs. Lamb*. *TTh*, 2:15-3:30.

* * *

In the Romance field the graduate work offered under the Claremont Graduate School centers on the following periods of the literature: French: Old French. 17th Century, 18th Century, 19th Century, Contemporary Period. Spanish: Pre-Golden Age, Golden Age, Spanish and Spanish American of 19th Century, and Contemporary Period.

Russian

1a-1b. ELEMENTARY RUSSIAN. *Mr. Ein*. Essentials of grammar, pronunciation, constant exercises in reading and writing, practice in speaking. Individual assignments in reading, writing and speech which will correspond to each student's needs and interests. 3 units. *TThS*, 9.

51a, 51b. INTERMEDIATE RUSSIAN. *Mr. Ein*. More advanced Russian language study through daily reading, writing, and translating. Continued practice in Russian conversation. Reading of Russian texts which serve as an introduction to Russian life, history and literature. Reading of selected classics in Russian. Individual assignments will correspond to each student's needs and interests (e.g. Sciences, History, Politics, Military Russian, etc.). 3 units. *TThS*, 10.

101a, 101b. READINGS IN SELECTED RUSSIAN LITERATURE. *Mr. Ein*. Prerequisite 51a and 51b or equivalent. 1 unit. May be repeated for credit. Arranged.

Sociology

Requirements for concentration: Sociology 51, normally taken in the Sophomore year, and 24 units of upper division courses in sociology. However, 3 of these 24 units may be chosen from the following: Economics 111, Government 157, Psychology 154.

Recommended courses: Students concentrating in sociology will find it helpful to take as many of the following courses as possible: Economics 51 and 52, Economics 57; Government 51 and 52; or Economics 51 and Government 52; History 1; Psychology 51.

Lower Division distribution. In sociology the requirements can be met in two ways: (a) by 51 and 52, which constitute an integrated year course, or (b) by 51 and any *two* higher numbered courses.

51. **INTRODUCTORY SOCIOLOGY.** *Staff.* Man's cultural heritage and collective behavior. The origin, structure, and functioning of human groups, and their role in personality and cultural development. The principal social processes, such as competition, conflict, cooperation, and assimilation. Results of social change. Not open to Freshmen. 3 units. First semester. Four sections. *MWF, 11, 1:15; TThS, 8, 9.*

52. **SOCIAL PROBLEMS.** *Mr. James.* A survey of the major problems of present-day society related to individual, family, community, and world disorganization. Typical problems studied are crime, delinquency, alcoholism, marital adjustment, race antagonism, labor relations, migration, and population pressures. Intended to follow Sociology 51 for students who plan to take only one year of sociology. Not recommended for students who intend to take several specialized courses such as Race Relations, Criminology, etc. Prerequisite: Sociology 51. 3 units. Second semester. Two sections. *TThS, 9, 10.*

102. **CULTURAL ANTHROPOLOGY.** *Mr. Baber.* The emergence of man and the development of his essential culture patterns, from Stone Age to Iron Age. The rise of language, writing, art, and the basic social institutions. A comparison of human behavior in widely separated primitive cultures to reveal the constant as well as the variable features of human society. The invention, diffusion, and integration of culture traits in the process of cultural change. Prerequisite: Sociology 51. 3 units. First semester. *MWF, 9.* (Alternates with 109. Omitted in 1953-54.)

106. **SOCIAL WELFARE.** *Mr. Scaff.* A survey of the various fields of social work and the major techniques and theories involved. Includes a description and analysis of case work, family welfare, child welfare, child guidance clinics, school social work, probation supervision, medical and psychiatric case work, group work, public welfare, and community organization. Visits to selected agencies. Prerequisite: Sociology 51. 3 units. Second semester, *MWF, 8.* (Omitted in 1953-54; given in 1954-55.)

107. **CRIMINOLOGY AND PENOLOGY.** *Mr. Baber.* Types of criminal behavior. The making of the criminal; causative factors. Changing interpretations of

crime. Methods of dealing with criminals through the police, courts, prisons, probation, and parole. Special treatment of juvenile delinquents; preventive measures. Prerequisite: Sociology 51, or *two* of the following: Economics 51, Government 51, Political Economy 1, History 1. 3 units. Second semester. Two sections. *MWF, 9, 11.*

109. MARRIAGE AND THE FAMILY. *Mr. Baber.* Factors involved in mate selection and the husband-wife and parent-child relationships. Adjustment of marriage and family patterns to our rapidly changing culture. Analysis of the factors promoting family disorganization; measures seeking to conserve the social values of family life. Prerequisite: Junior or Senior standing. 3 units. First semester. *MWF, 9.* (Alternates with 102.)

110. RACE RELATIONS. *Mr. Baber.* Concepts of race and culture. The nature of race contact and the development of race consciousness and conflict patterns. The experience of several nations with racial minorities, with emphasis upon American experience with Negroes, Mexicans, and Orientals. Some areas and trends of prejudice and discrimination. Prerequisite: Sociology 51 or *two* of the following: Economics 51, Government 51, History 1. 3 units. Second semester. *WF, 2:15-3:30.* (Alternates with 152.)

111. POPULATION AND MIGRATION PROBLEMS. *Mr. Scaff.* Factors influencing population growth or decline. The social and economic effects of an increasing, static, or declining population. The significance of the rates of increase in the different racial, economic, or social elements of the population. Suggested policies for controlling the quantity and quality of the population. Trends of internal migration, especially to the Pacific Coast. Prerequisite: Sociology 51, or sufficient background in the other social sciences to satisfy the instructor. 3 units. First semester. *MWF, 8.* (Omitted in 1953-54; given in 1954-55.)

112. THE AMERICAN COMMUNITY. *Mr. Scaff.* An analysis of modern American urban communities in contrast with rural communities. Urban ecology applied to the Los Angeles area. The community's class structure and institutional composition. Community planning. Approximately half the course devoted to lectures and discussions, half to field investigation and projects in the local area. Prerequisite, Sociology 51 and instructor's permission. 3 units. First semester. *MW, 2:15-3:55.* (Omitted in 1953-54; given in 1955-56.)

135. GROUP DYNAMICS. *Mr. James.* The application of the small group frame of reference to the study of group life. The course investigates the small group as a social system, types of small groups, and the inter-group structure of organizations. Pre-requisite: Sociology 51. 3 units. First semester. *MWF, 8.*

136. SOCIAL ORGANIZATION. *Mr. James.* The structure of society as a whole in terms of institutions, stratification, and spatial and temporal arrangements. The interrelatedness of the several components of social organization will be stressed and developed. Prerequisite: Sociology 51. 3 units. Second semester. *MWF, 8.*

52. **SOCIAL CONTROL.** *Mr. Baber.* An analysis of human nature and its social origin. The evolution of social control and its increasing complexity, due to the acceleration of social change in modern culture. Society's means of creating and maintaining its social patterns, through law, public opinion, propaganda, education, religion, rewards, etc. Individual control versus social control. Open to Juniors and Seniors only. Prerequisite, Sociology 51. 3 units. Second semester. *WF, 2:15-3:30.* (Alternates with 110.)

53. **THEORIES OF SOCIAL REFORM.** *Mr. James.* A study of various proposals for social reconstruction including: the Utopians, Marxian Socialism, Fabian Socialism, Syndicalism and Guild Socialism. An investigation of contemporary experiments in social reorganization: the British Labor Movement, German Nazism, Italian Fascism, Russian Communism, and the Cooperative Movement at home and abroad. Prerequisites: Sociology 51, or *two* of the following: Economics 51, Government 51, History 1. Open to Juniors and Seniors only, 3 units. First semester. *MWF, 10.*

54. **TWENTIETH CENTURY SOCIOLOGY.** *Mr. James.* The rise of modern sociology from the time of Comte and Spencer. Attention to various movements of social thought. Emphasis on the major contributions from Europe and America to sociological theory since 1900. Prerequisite: Sociology 51. Open to Juniors and Seniors only. 3 units. Second semester. *MWF, 10.*

191A-191B. **SOCIAL INVESTIGATION.** *Mr. Baber.* Methods of investigation and research as applied to both individual and group work. The effective presentation of social data. Observation and analysis of the work of various social agencies and programs. Individual projects for some; supervised field experience (in selected agencies) for others, according to the interests and needs of the student. Open only to seniors with the written permission of the instructor. 3 units. Arranged.

Speech and Dramatics

Requirements for concentration:

Lower Division Courses: Speech and Dramatics 32a, 32b, 51 (at least two units), 57, 61a, 61b, and History 1A-1B, in fulfillment of which requirements transfer students may offer equivalent courses pursued at other colleges.

Upper Division Courses: Speech and Dramatics 134a, 134b, 160A-160B, English 155a, 155b and Scripps II-150 or Comparative Literature 181a, 181b, or Speech and Dramatics 112A-112B or 131A, 131B. Fluency in at least one modern foreign language (preferably French) is recommended.

In the comprehensive examination the books on a supplementary reading list will be included.

In addition to the comprehensive examination, a demonstration of creative ability in the field of concentration is required.

In addition to the required work in the Speech and Dramatics concentration the following offerings are suggested as suitable electives, the choice among them depending on the student's particular interests: *Lower Division*: Art 3a-3b and 51a-51b, Music 53a-53b, Speech and Dramatics 52a, 52b and 53b, English 50a, 50b, 58, and 64. *Upper Division*: Art 105a-105b, Music 103a-103b, Physical Education 130a, 130b, Spanish 113 and 114, French 120a-120b, Scripps I-106 and I-107, English 103a, 103b, 111, 151.

32a, 32b. VOICE AND DICTION. Study of the mechanics of voice production and of the elements of English phonetics. Practice designed to develop good voice and diction. Permission of the instructor required for registration. 2 units *MW*, 11.

51a, 51b. PLAY PRODUCTION. *Staff*. Directed study in play production, both in acting and in the technical problems of the stage. One unit of credit may be granted for either fifty hours of rehearsal time under direction, or fifty hours of technical work under direction, or for fifty hours of rehearsal and technical work combined. Not more than two units of credit may be granted in any one year. A total of eight units of credit may be applied toward graduation.

52a, 52b. FUNDAMENTALS OF SPEECH. Exercise in voice development and platform deportment. Training in analysis of subjects, selection and arrangement of material, psychological adaptation of material and treatment to specific audiences. 2 units. *MW*, 9.

53a, 53b. PRINCIPLES OF INTERPRETATIVE READING. Study of the technique of effective oral interpretation of literature. Application of this technique in the reading of various literary types. 2 units. *TTh*, 10.

55a, 55b. ARGUMENTATION AND DEBATE. Study of the principles of argumentation and practical application of these principles in class debates. Debate subjects for the year analyzed and debated. 2 units. *Th*, 2:15-3:55.

61a, 61b. CHARACTER PRESENTATION IN DRAMATIC LITERATURE. *Mrs. Allen*. An approach to dramatic literature through the actor's art. A study of theories of acting and principles of stage behavior. Pantomime and improvisation to develop concentration, observation, imagination, co-ordination, and control. Scenes from plays, both classic and modern, will be studied with emphasis on interpretation. Permission of instructor required. 3 units. *TThS*, 10.

112a-112b. PLAYWRITING. *Mrs. Allen*. The theory of playwriting with supervised practice in this technique. A study will be made of the structure and style of significant plays for their light on the problems of the beginning playwright. Permission of instructor required. Alternates with Speech and Dramatics 160. 3 units. *TThS*, 9.

131a, 131b. ADVANCED SPEECH. Training in the construction and delivery of formal addresses. Prerequisite, Speech and Dramatics 52 or equivalent. 2 or 3 units. *TTh*, 9.

134a, 134b. **READING OF DRAMATIC LITERATURE.** Intensive study of a limited number of standard plays, with emphasis on dramatic values in character and plot. Interpretative reading of these plays in class. Recital programs before the class. Prerequisite, Speech and Dramatics 53 or equivalent. 3 units. *MWF, 10.*

160a-160b. **THEATRE PRACTICE.** *Mrs. Allen.* A survey of historical backgrounds of stage forms and of contemporary production methods. A study of theories, problems, and techniques of production applied to plays of various types. Analysis of problems confronting the theatre worker, in acting, direction, design, criticism, and management. Practical experience in directing a short play. Advanced problems in the analysis and presentation of character, with concentration on *styles* of acting. Representative plays of various periods (Greek, Elizabethan, Restoration, Eighteenth Century, Modern) will be used for study and practice. 3 units. Alternates with Speech and Dramatics 112. *TThS, 9.* (Omitted in 1953-54.)

INTRODUCTION TO DRAMA. For description see English 57.

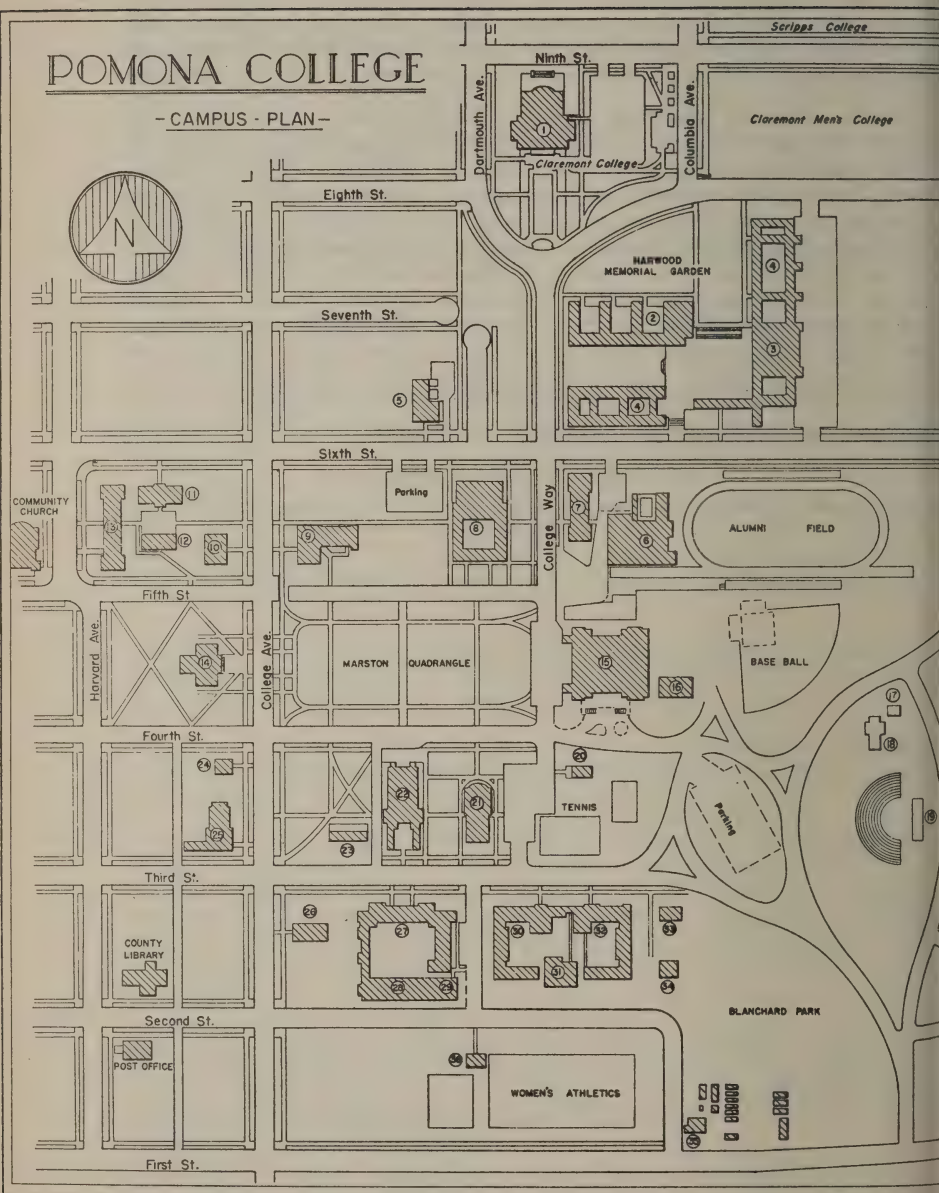
SHAKESPEARE. For description see English 155a, 155b.

AVAILABLE AT SCRIPPS COLLEGE

11-150a, 150b. **HISTORY OF THEATRE AND DRAMA.** *Mr. Workman.* *MWF, 11.*

POMONA COLLEGE

- CAMPUS - PLAN -



POMONA COLLEGE CAMPUS PLAN

(See map on opposite page)

1. Honnold Library for the Associated Colleges.
2. Helen R. Walker Hall, residence for men.
3. Frary Hall, central dining hall for men.
4. Eli P. Clark Hall, residence for men.
5. Baxter Medical Building for the Associated Colleges.
6. Memorial Gymnasium and Swimming Pool.
7. Smiley Hall, residence for men.
8. Edmunds Union, including student offices, cooperative store, ballroom, and lounges.
9. Holmes Hall, classrooms and assembly hall.
10. Pearsons Hall, physics laboratory, mathematics department.
11. Crookshank Hall, botany, biology, and zoology laboratories.
12. Harwood Hall, department of psychology.
13. Mason Hall, chemistry and geology laboratories.
14. Carnegie Building. Class rooms and offices.
15. Mabel Shaw Bridges Auditorium, auditorium seating 2600, operated by Claremont College in behalf of the Associated Colleges.
16. Renwick Gymnasium.
17. Seaver Laboratory, containing classrooms and library for the department of astronomy.
18. Frank P. Brackett Observatory.
19. Open-Air Theatre.
20. Replica of original home of Pomona College.
21. Sumner Hall, administration and classroom building.
22. Mabel Shaw Bridges Hall of Music, assembly hall for recitals and chapel services; music studios and practice rooms.
23. Rembrandt Hall, art studios.
24. President's House.
25. Claremont Inn, guest house for college and community, private and public dining rooms.
26. Baldwin House, residence for women.
27. Harwood Court, residence hall for women.
28. Aurelia Squier Harwood Memorial Dining Hall for women.
29. Mary McLean Olney Dining Hall for women.
30. Della Mulock Mudd Hall, residence for women.
31. Jessie E. Gibson Dining Hall for women.
32. Florence Carrier Blaisdell Hall, residence for women.
33. Brackett House, residence for women.
34. Kenyon House, residence for women.
35. Heating Plant and Maintenance Shops for the Associated Colleges.
36. Field House for women's athletics.

The Business Office for the Associated Colleges is located in Harper Hall at College and Tenth Streets.

The Infirmary for the Associated Colleges is located on Amherst Avenue north of Foothill Blvd.

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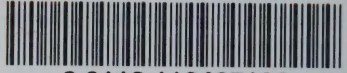
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